

THE JOURNAL OF THE *Michigan State Medical Society*

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

PERSONAL SERVICE

Medical service is and doubtless, by its very nature, must remain a distinctly personal service. Even in this age of standardized commodities for the table, ready-to-wear clothing, and interchangeable spare parts for all types of machines, there has been no plan suggested for the reduction of medical diagnosis and treatment to basic units which can be ordered from traveling salesmen or acquired through correspondence courses. The physician must see his patient and see him, in many cases, over an extended period of time if the diagnosis and treatment are to achieve the greatest possible accuracy and efficiency. There is no substitute for personal observation.

Man is not a standardized machine, and each individual reacts to the conditions of life in a manner in some respects unique. In the treatment of disease, this individual variation is a factor of great significance and can receive due consideration only when the practitioner has known the patient for a considerable time and maintains a personal relation with the patient.

—*From the President's Address of Dr. M. L. Harris
at the Detroit Meeting of the A. M. A.*

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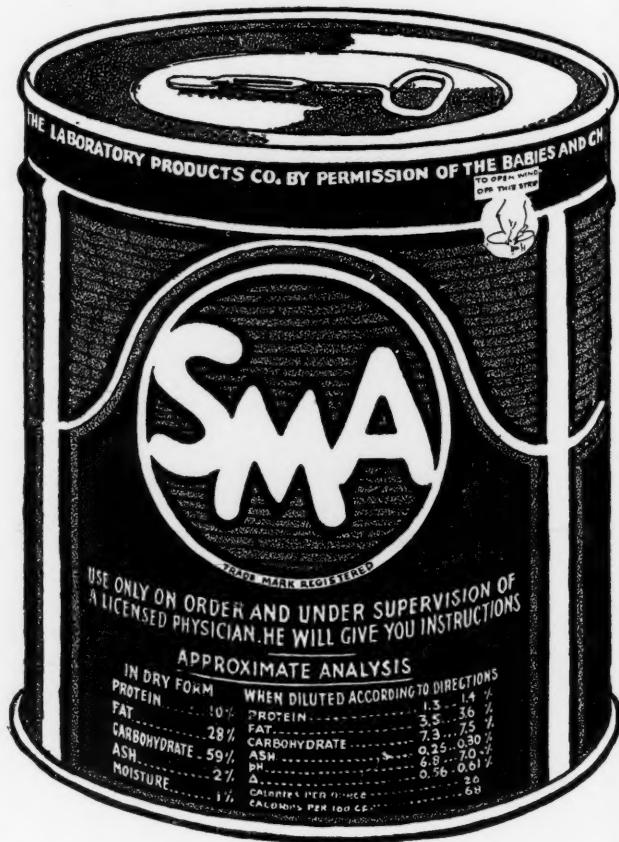
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ANGINA PECTORIS, INCLUDING CORONARY THROMBOSIS*

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DETROIT, MICHIGAN

Angina pectoris is a disease which is characterized by one or more of the following symptoms: (1) Stenocardia or a sense of constriction in the chest; (2) Pain of a deep-seated nature usually arising in the upper substernal region—pain which, in the earlier history of the individuals suffering from the disease, is brought on by exertion, ordinarily ceasing with the cessation of exercise. The pain radiates, commonly, up to the left shoulder and down the left arm; occasionally it is right-sided pain only and, in certain cases, radiates up into the neck; rarely the pain is epigastric in location. (3) Frequently there is also associated with these symptoms a fear of death but this is the least important of the three symptoms. The reflex nature of the phenomena of muscular contraction and pain radiation deserves special emphasis.

As to pathology, Sir Clifford Allbutt, in his treatise on the subject, advances, as his explanation, changes in the first portion of

the aorta and associates the symptoms with the tension of this artery. In our series of 93 cases, studied at this time, aortic enlargement was present in 31 cases; however, most of these cases had definite signs also in the heart itself. The present trend of opinion among cardiologists is to attribute coronary artery disease as the only cause of angina pectoris, those showing aortic disturbance being explicable on the associated changes taking place in the opening and first portion of the coronary artery. The usual explanation of the symptoms, to which we subscribe,

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is that they arise from changes in the caliber of, or obstruction to, the coronary artery, causing diminution of the heart's blood-supply, in this way making it impossible for the heart to supply the circulatory needs, and the angina in this case is simply a signal for the organism to exert as little effort as possible. The condition of intermittent claudication, appearing as the result of endarteritis, is an analogous condition.

Coronary thrombosis, which may be considered the most severe expression of angina pectoris, has the same pain distribution as the less serious condition, more commonly met, the chief characteristic of the pain being its continuity, it being a matter of hours or days, and may be entirely unassociated with physical exertion.

As far as etiology is concerned, infection seems to play an important role. To syphilis has been attributed too much significance in this connection, if we can judge from our own experience, as there are only 5 positive Wassermanns out of 44 that were run. Levine, in discussing the matter in an article in the Journal of The American Medical Association, September 26, 1922, reports positive reaction in 6 out of 81 cases or about 7%. The stigmata of syphilis in general are not so common in this class of patients. The striking fact that often presents itself is the evidence of physical development and the history of superiority in some branch of athletics in earlier life. The fact of ordinary streptococcus or influenzal infection being an etiological factor is incontrovertible. In this group of cases, in the acute forms and in early life, this is especially true, although occasionally syphilis is the exciting cause. A familial tendency may also be in evidence. In the case of patient No. 1461, there is a history of the death of her mother, one brother and one sister of angina pectoris, while a living brother has angina. Arterial degeneration, with a selective action on the aorta and coronaries, is a big factor in later life. For the purpose of comparison, the etiological factors in 25 unselected cases of heart disease were noted and the types of etiology were found to be the same as those in our table for angina pectoris; that is to say, the predominating factors were rheumatism, tonsillitis, infected teeth and influenza. In the cases below 20 years of age reported in the literature, aortic insufficiency of rheumatic fever causation was always present.

Of 93 cases reported, there was one under 20 years of age; between 20 and 30 years, there were four males and two females; between 30 and 40, there were 9 males; between 40 and 50, 12 males and 7 females; 27 males and 4 females between 50 and 60; 17 males and 6 females between 60 and 70; 3 males between 70 and 80, and one male over 80.

Symptomatology: The three cardinal symptoms, stenocardia, angina pectoris and doloranimi, are not always present, the one of chief importance being stenocardia. The description given by patients is of a vise-like feeling in the upper chest. This is often associated with a sensation of choking. The most fatal form of this disease need not be associated with anything more severe in the way of symptoms than a mild stenocardia. A significant onset of the disease is that it follows some form of unusual exercise without a period of preparation, such as playing ball at a family picnic, the patient not having played for months before. While a true case of angina pectoris may be associated with decompensation, it is not a common occurrence and there is no particular connection between the two, although decompensation may appear late in the history. In Case No. 1003, who had been under observation since October, 1920, when first seen, there were no signs of decompensation. In February, 1921, however, marked symptoms appeared and when before no persistent valvular murmur could be detected, there was a definite systolic murmur audible all over the heart area. A moderate condition of edema was present, going up to the knees. This patient also presents what has been called angina de toilette. The day before the last consultation in the office, he did not dare use the tooth-brush, for fear of bringing on an attack. This patient has, besides, nocturnal attacks. In early life he was champion oarsman and is of fine physical build. In another case, No. 529, when seen five years before, there were absolutely no signs of decompensation. When called again in consultation, November 17, 1922, there was marked congestive heart failure, with a right hydro-thorax.

As far as the heart itself is concerned, the following lesions were noted: Aortic enlargement in 31 cases, aortic stenosis 1, aortic insufficiency 2, mitral insufficiency 5, aortic and mitral insufficiency 4. The re-

mainder of the cases may be attributed to arteriosclerotic conditions only.

The pulse-rate does not seem to be increased by angina pectoris, considered as such. The average pulse-rate in this series was 82. When seen in severe attacks, it is surprising how little apparent cardiac disturbance may be noted, as shown by changes in the heart-sounds or increase in pulse-rate. The same fact may be noted concerning blood-pressure. In a few cases, it was high but evidently associated with arterial change in general. The average systolic blood-pressure on the whole group was 143, diastolic 77. The highest age was 80, the lowest 16, longest duration 23 years and shortest 2 hours. The number of known deaths was 31, of which there were 10 sudden deaths.

	20—30	30—40	S.—D.	S.—D.
Average, whole group.....	122—83	131—79		
Male	120—86	131—79		
Female	125—77			

presenting substernal pain alone numbered 21 cases; substernal and down the left arm only, 43; substernal and down the right arm alone, 2; substernal and down both arms, 26; substernal and radiating to the neck, 7; epigastric, 6; nocturnal attacks, 8. In one of the epigastric cases, although the history clearly showed that the attack of pain came on after unusual exercise only, a consultation of surgeons was held and the patient barely escaped being operated upon for gall-bladder disease. The radiating pain may not be very severe, rather a sensation of numbness and anesthesia, and again, tingling and burning may be perceived in its stead.

Electrocardiograms were run in 57 cases of this series. The chief abnormality is a negative T-wave which was present in 32

	40—50	50—60	60—70	70—80	80—90
S.—D.	S.—D.	S.—D.	S.—D.	S.—D.	S.—D.
144—90	149—87	149—86	167—100	112—62	
135—88	149—87	146—82	167—100	112—62	
157—96	150—71	158—95			

In the total number of cases in the group, there were 74 males and 19 females. The blood-pressure in age-groups is as follows:

We have not made any division of true and pseudo-angina because we believe we either have or do not have the disease and that the term angina should not be applied, except when the diagnosis is certain. In neurotic individuals, a diagnosis of this kind should not be made without definite pathology. A differential diagnosis is not difficult usually in these cases on account of the association of nervous phenomena.

Irregularity of the heart was not common in this series, only 9 cases of premature systoles and 2 cases of auricular fibrillation being noted. Seven cases of premature ventricular systoles appear in the series; in one, premature auricular systoles, and in one, sometimes ventricular and sometimes auricular. There was one case of sinoauricular block, true block in one coronary thrombosis, ventricular tachycardia in another case of thrombosis, being followed by right bundle branch block, on the cessation of the tachycardia. This case was one sine dolore, the only one in the series complaining of neither stenocardia nor pain.

The character of the pain varies from that of extreme mildness to that of excruciating distress. Primarily the pain is found in the upper substernal region, never radiating around the chest but very deep-seated, shooting directly to the left shoulder and down the left arm. In this series of cases, those

cases; in Lead I alone in 8 cases; in II only in 3 cases; in III alone in 12 cases; in Leads I and II in 4 cases; in Leads II and III in one case; in Leads I and III in 4 cases; in Lead I in 1 case, and all Leads in 1 case. There was a cove-shaped T-wave in 12 cases.

The urinary findings in this group were unimportant. In the blood-nitrogen tests made, no marked changes were found.

The prognosis is not invariably fatal, the patient often dying of intercurrent conditions, such as pneumonia or as a result of arteriosclerosis in some other part of the body. The ability of the patient, financially and temperamentally, to live on a plane in accordance with the diseased condition, is the largest factor in lengthening the life of the individual. The prognosis in coronary thrombosis is extremely bad. Of 12 cases reported, only 5 are known to be living.

The pain of coronary thrombosis may last for hours or days and, also unlike the ordinary attack, is not provoked by physical exertion or emotional excitement. With coronary thrombosis, we have also various types of arrhythmia, such as heart-block, which is usually partial and occurs in the early stages. Very frequently auricular fibrillation is present, which may be preceded by premature systoles, paroxysmal tachycardia or auricular flutter. In one recent case which was unusual in that the patient complained of no pain, ventricular tachycardia was the cause of the presenting symp-

toms. When last seen, right bundle-branch block was present. On account of the cardiac infarction which takes place in coronary thrombosis, various unusual proteins are absorbed, causing elevation of temperature, which is usually moderate, this being accompanied by leukocytosis, which varies from 12,000 to 30,000. In the electrocardiograms, there are marked changes in the S-T interval, as well as the changes due to arrhythmia. In very early cases there is an R-T connection without the intervention of any S complex, the wave arising high on the downward limb of the R-wave. The more usual condition a little later is the peculiar S-T wave, cove in shape with the convexity upward, the origin at the S-wave being commonly below the isoelectric position of the string.

Dr. Parkinson's description of the electrocardiographic findings are as follows: "Usually a definite sequence of changes in the R-T segment and in the T waves is recorded. Shortly after the onset of symptoms a transient deviation of the R-T segment from the isoelectric plane occurs. This is followed by a deep inversion of the T-wave in either Lead I or Lead III but not in both, and often by a lesser degree of T inversion in Lead II. Curves obtained after a few weeks conform to one of the two main types, according to the incidence of T inversion in Lead I or in Lead III. Subsequent T-wave changes in the direction of the normal are recorded and even complete return to normal occurs. A negative T-wave in Lead III alone may be significant of past infarction."

Pain in coronary thrombosis more commonly radiates to the epigastrium than in the ordinary case of angina pectoris and the necessity of differentiating between coronary thrombosis and upper abdominal disease by the operating surgeon should not be overlooked. This can readily be done by means of the electrocardiographic examination and careful study of the history. A striking sudden fall of blood-pressure, frequently there being a 100 mm. drop in the systolic pressure, is significant. With cardiac infarction and consequent change in the epicardium, a pericardial friction rub may often be heard and should always be diligently looked for.

Treatment: The chief requisite in the line of treatment is the modification of the patient's life to a plane below that which brings on an attack. In the treatment of

acute attacks, the use of nitroglycerine 1/100 grains simply allowed to dissolve in the mouth, from which absorption takes place in three or four minutes, in most cases is sufficient to stop attacks. In some cases, perles of amylnitrite minims 5 by inhalation, are more effectual. If the blood pressure needs modification, during the period between attacks, we have found that sodium nitrite grains 1 or 2, four times a day, is usually effective. As a coronary dilator we have had the best results with theobromine in doses of grains 5, three times a day, increased if necessary. The use of ephyllin grains 1½ three times day is also beneficial along this line in certain cases. The use of some form of iodine, usually sodium iodide, in moderate doses, such as grains 5 three times a day, over a long period, is to be recommended, although it is a little difficult to gauge results on account of the slowness of its action. Where it interferes with the general well-being, causing loss of appetite, we have usually omitted its use for short periods. In acute attacks, where nitroglycerine is ineffective, the opiates have to be resorted to, either in the form of morphine sulphate, or, if the necessity of using over a long period is present, we have preferred codein alkaloid in ½ grain doses four times a day. Hyocyamus in the form of the extract, ¼ grain three times a day, is a useful adjunct. Considerable benefit in warding off attacks has resulted from the resort to the electric pad, which gives a more even heat than the hot water bottle. In a very few cases, general anesthesia had to be resorted to, in order to quiet the pain. The treatment of coronary thrombosis is along the same general lines as angina pectoris, absolute rest for a long period of time after the attack being imperative. We have had no experience with operative treatment of angina pectoris, but can see that it might be indicated in certain cases of unusually efficient myocardium, where the sensation of pain may not be necessary as a warning or where the pain may be excessive in relation to the amount of pathological condition. In general, we believe the pain is a factor of safety which should not be removed and, thus far, we have found no cases where we have considered it justifiable and where the patient was willing to consent to operation. In general, where the condition warrants operation, the patient cannot see its necessity, on account of his general well-being.

The following illustrative cases are unusually interesting:

G. Z.—Age 16; white, male.

Chief complaint—Pain over the heart and down left arm; shortness of breath.

The patient states that up to nine years ago he was healthy. He first noticed about that time a shortness of breath. He was in Children's Hospital over a year when he was taken out by his father. Later his legs and his feet began to swell and he went to Roosevelt Hospital for about five

Lungs showed no fluid, no râles and no consolidation.

Heart examination revealed systolic murmur at the apex, transmitted to the axilla, and diastolic murmur heard in the aortic area; pistol-shot sound in the brachial, capillary pulse. There was marked pulsation of all the visible arteries. Systolic and diastolic murmur heard over mitral region; accentuated second pulmonic. Left border about one and one-half inch to left of nipple line in the seventh interspace.

There were no tenderness, no rigidity and no

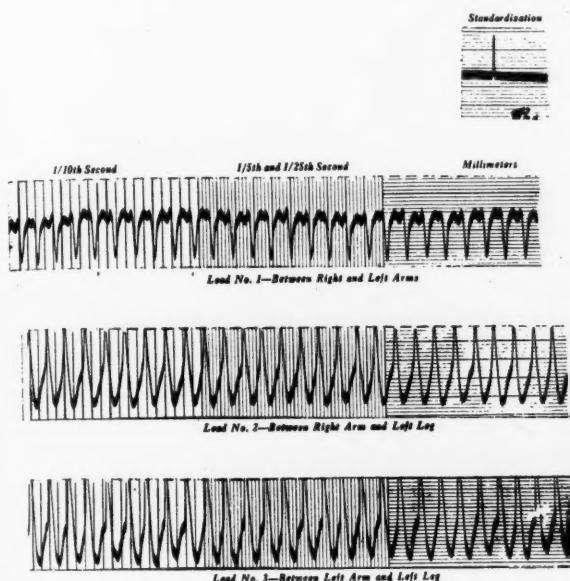


Fig. 1. Case 3. Ventricular tachycardia. Rate 300 per minute.

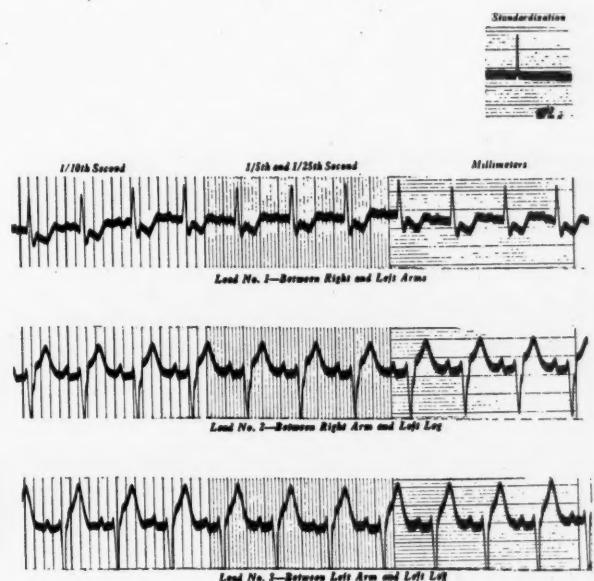


Fig. 2. Case 3. Normal rhythm. Right bundle branch block.

months and from there he went to the Detention Home for a period of about three years, when he felt fine and then began to have shortness of breath again which came on with an attack of the grippe. At this time he went to Harper Hospital, where he stayed fourteen weeks, and was relieved for about one year and he again went to Shurley Hospital for ten weeks and since then has had what he calls heart "spells" with considerable pains. In the past year has felt good with the exception of his heart spells. On the night before admittance, he had several attacks of sharp pain and a feeling over the heart, with sharp shooting pains down the left arm.

The patient states that outside of present condition he has never been ill.

There was swelling of the feet and ankles; no night sweats; no loss in weight. There was no nausea, no constipation, no vomiting. Appetite was good. Bronchial colds were infrequent; sore throats, infrequent. Urine: night, none; days, 4 and 5 times. There was no pus, blood and no burning.

Working diagnosis: Endocarditis, mitral insufficiency, aortic regurgitation.

There was no impairment of vision; pupils were round, equal and reacted to light and accommodation. There was no discharge and no obstruction in the nose. No impairment of hearing and no discharge from the ears. Tongue was normal. Teeth showed one cavity; otherwise in good condition. Tonsils had been removed. Throat was normal. Glands showed no enlargement; thyroid, no enlargement.

Chest examination revealed the patient to be poorly nourished and developed. Percussion note was resonant. Respiratory movements were labored.

masses in the abdomen. Genitalia were apparently normal. Extremities revealed no paralysis nor deformities. Vessels showed slight sclerosis and no varicosities. Nervous and mental reflexes were present and equal on both sides.

Wassermann test was negative—R. B. C., 4,606,000; W. B. C., 11,800; polymorphonuclears, 61%; lymphocytes, 38%.

Urinalysis: Specific gravity, 1.030; no albumin, no sugar.

This patient had attacks of typical angina pectoris, both by day and night, which were relieved by amylnitrite, having used as many as a dozen perles of amylnitrite during a single night.

This patient developed pneumonia in the spring of 1928 and died after a short illness.

Case 2.—W. E. F. White, male physician, age 58.

Family history was of no importance. Patient had diphtheria fifteen years ago, a short severe attack. Two years ago, glycosuria was discovered; says he has been on a careful diet since that time, arranged by himself. Wednesday night, November 3, while shoveling coal, he had pain on the inner aspect of the left elbow in a small circular area and the next morning, the left ulnar nerve was sore. That night there was an attack of difficult breathing while sitting in a chair. The night's rest was very poor, the pulse weak and thready. At the time of the first examination on Friday, November 5, the heart rate was 100 and the heart's action regular. There was no definite cardiac enlargement made out. While the night before the systolic blood pressure was 200, at the time of examination it was 155. Patient said the night before the heart's action was absolutely irregular. The chest was full of moist râles and cyanosis

was present. On Saturday, November 6, the pulse rate was 90, heart's action absolutely irregular, temperature 98.6, while the night before the temperature had been 100. No definite enlargement of the heart could be made out. The cardiac rate was 128 and respiration periodic in type. On Sunday, November 7, the temperature was 99.8; pulse 104; cardiac rate 138; systolic blood pressure 140; diastolic 100. On Monday, the eighth, temperature was normal; pulse 110 and regular; auscultatory rate 112; respiration 20. There was a slight pericardial friction rub heard in the third and fourth left intercostal space, close to the sternum; also a few crackles at the lung bases. On November 9, the pulse rate was 114 and regular; systolic blood pressure 170; diastolic 120. Pericardial friction rub was still present. During the night, the patient suddenly became worse and died.

Laboratory findings by Owen Clinical Laboratory were as follows:

November 6.—Blood sugar, 476 mgms. per 100 c.c. of blood; blood-count, R. B. C., 4,360,000; hemoglobin, 85 per cent; index, 0.93; W. B. C., 22,100; polymorphonuclear leukocytes, 88 per cent; lymphocytes, 8 per cent; large mononuclears, 4 per cent. Red blood cells are normal in size, shape and staining.

November 8.—Urinalysis—Appearance, normal, clear; specific gravity, 1.022; reaction, acid; moderate amount of albumin, no sugar, diacetic acid none, no bile nor indican; many granular casts, no pus or blood; centrifuged sediment moderate.

Case 3.—L. S., white, male, age 25 years.

All members of the family were reported as alive and well. Chief complaint: Palpitation and shortness of breath, also dizziness.

The patient while going up the stairs a week ago Sunday noticed his heart began to beat very rapidly. In a few minutes he broke out in a sweat and became very pale and also became short of breath and felt very weak. He was unable to walk to the street and get in a taxi to go to the doctor. He was unable to sleep that night, and was brought to the hospital in the ambulance the next day. He stated he has never fainted but has felt dizzy for about six days; that his heart beat has gradually become slower, and he has not had any pain in the cardiac region for the last two days. Patient stated he has been very restless and could not sleep at night.

The patient gave a history of head colds and frequent sore throats. No history of typhoid fever, smallpox, scarlet fever, diphtheria, tuberculosis or syphilis. Patient says he has had gonorrhea. The patient slept well before he became ill; at time of reporting to hospital he was unable to sleep very well. Bowels were regular. He was not troubled with night frequency.

The patient lay propped up in bed and did not appear acutely ill. He was described as having brown hair, blue eyes. Teeth were in good condition. Skin

was moist, had good elastic qualities, no eruptions. Pupils were round and symmetrical and reacted to light and accommodation. Hearing was good, no obstruction, no discharge or bulging, no mastoid tenderness. Tonsils were hypertrophied; no discharge. Neck revealed no abnormal pulsation; thyroid was not palpable. Chest was symmetrical. Percussion, normal lung resonance.

Cardiovascular rate was 208 per minute. Heart sounds were too rapid to hear murmurs.

Liver, spleen and kidneys were not palpable. There was no evidence of hernia; no masses, tenderness or rigidity; no surgical scars; no swelling or edema of legs or ankles. Knee-jerks were not obtainable.

W. B. C., 31,200; polymorphonuclear leukocytes, 90 per cent; hemoglobin, 80 per cent; R. B. C., 4,420,000.

September 1, 1928, ventricular rate as shown by electrocardiogram was 300 per minute and the diagnosis of ventricular tachycardia was made.

September 5, 1928, cardiac rate was 105 by electrocardiogram and right bundle branch block was present. Lips were good color; lungs clear; no edema; feet cold.

September 7, blood pressure was 106/95. September 7, much improved.

Urinalysis, August 28, gave appearance, amber, cloudy and red; reaction alkaline; albumin, trace, and sugar present.

Final diagnosis—Coronary thrombosis with ventricular tachycardia.

Prophylaxis: The habits of life in regard to food intake may have a very important bearing on the incidence of arterial disease, and so of the diseases under consideration. High protein intake, with the use of highly seasoned food, is an important predisposing factor. Alcohol and syphilis combined have a very deleterious influence on the vascular system, and with the contraction of syphilis alcohol should be interdicted. In the production of coronary thrombosis infection is probably a large factor, and in people of middle age the enforcement of a long rest period after such infection may be a most helpful prophylactic measure. Exercise of a not too strenuous type, such as golf, which engages the whole musculature, thus increasing general bodily metabolism, and causing the more thorough elimination of toxic waste products, is also very important.

SOME ASPECTS OF THE MANAGEMENT OF CORONARY THROMBOSIS AND ITS COMPLICATIONS*

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Until recent years the diagnosis of coronary thrombosis with infarction of the heart was made almost entirely by the pathologist. The clinical picture of this condition was understood little previous to 1910. In the study of the massive literature on angina pectoris one finds many of the features of coronary thrombosis interwoven in the characterization of the so-called fatal cases of angina pectoris. However, the first satisfactory account of the clinical features associated with coronary thrombosis and infarction of the heart did not appear until the publication of Obratzow and Straschesko,¹ in 1910. They emphasized three symptoms: severe, lasting, retrosternal pain; dyspnea; and gastralgia. In 1912, Herrick² published a most important contribution in which his classification of this condition indicated that not all of these cases are necessarily fatal. Since that time numerous important publications have appeared, some of them dealing with clinical features in general, and others with the more special features of the disease. The articles of Wearn³ and Hamman⁴ have been outstanding among those having to do with general clinical features. Most of the literature has been occupied with a presentation of the pathologic findings, the diagnostic survey, and characterization of the complications of coronary thrombosis. It is not surprising that the interest in such a dramatic clinical picture has been focused so predominately on the diagnosis rather than on the treatment of this tragedy, and especially so when one realizes that it has been considered to be almost always immediately, or very shortly, fatal in its outcome. By this time enough cases have been studied and followed to demonstrate that many do not die immediately as a result of the acute insult, but actually return to an active and comfortable life for months or even years. Recently Levine and Brown⁵ have reported such a series of 145 cases, describing the various clinical features, and it is largely from the experience with many of these cases that the author presents some of the aspects of the management of coronary thrombosis and its complications.

Perhaps, for the purpose of correlation with subsequent statements, it is fitting at this time to review briefly some of the clinical features, particularly those of diagnostic importance.

The whole clinical picture is dependent upon a single event; namely, the occlusion of a coronary artery or one of its important branches. This occlusion is due most often to the formation of a thrombus on an arteriosclerotic base. Attending this obstruction there is a variable degree of interference to the blood supply, and resultant necrosis of heart muscle. If this necrosis is extensive enough to involve the endothelial surface, mural thrombosis occurs, and if the pericardial surface is involved a fibrinous pericarditis may result. If the myocardial necrosis lies in the path of the conduction system serious arrhythmia may develop. If death does not ensue before an adequate time has elapsed, healing of the infarction takes place as in any other organ.

In the clinical picture, the most typical symptom is that of pain. Characteristically, a severe painful discomfort usually unlike the patient has ever experienced before, appears suddenly and is felt under the sternum. This discomfort may be a sharp or a dull pain; it may be a feeling of pressure, vise-like in character, or a feeling of oppression. Individual patients describe it differently. It may be a terrific exaggeration of the pain similar to that experienced in previous attacks of angina. Typically, it is most severe under the sternum rather than out in the region of the apex. It may be most severe under the upper end of the sternum, or located even in the epigastrium. It is the upper abdominal distribution of pain that is confused so often with acute surgical abdominal conditions, such as ruptured gastric ulcer,

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gall-stone colic, acute appendicitis, and acute pancreatitis. The pain may possess all the vagaries of distribution of radiation that are characteristic of angina pectoris. In contrast to angina pectoris the pain may last hours or days rather than seconds or minutes. The pain of coronary thrombosis may, and in fact often does, come on without exertion.

The attack is accompanied by the general picture of shock, the patient having a cold moist skin with ashen color. Nausea and vomiting may occur during, or even initiate, the attack and these symptoms together with upper abdominal pain account for the erroneous diagnosis of acute indigestion, so often mentioned in the headlines of the daily newspapers. Dyspnea out of proportion to other evidence of circulatory insufficiency is common.

The important physical findings include weak, distant, or almost inaudible heart sounds, especially the first sound at the apex. The systolic blood pressure is usually lower than its level previous to the infarction, and the pulse rate may be slightly accelerated. These findings are in contrast to those of angina pectoris, in which the blood pressure remains unchanged or is apt to rise, and often the pulse rate is unchanged. Soon after the beginning of the attack it is common to find some degree of fever lasting from a few days to a week, and during this time there is a moderate leukocytosis.

In the atypical cases the diagnosis will be difficult and may depend entirely on the discovery of one of the critical signs, such as pericardial friction rub, unusually low blood pressure, or the characteristic electrocardiographic changes.

The clinical recognition of this diseased condition is so young that no very definite precedent in treatment has been established. The treatment is organized partly on a basis of theory, having in mind the pathologic physiology of the underlying process, and partly on the basis of experience.

In general, the management may be discussed under the following three headings: the acute attack, the period of recovery, and the complications. In those cases in which the course of the attack is simple, the treatment can be expressed in the form of a few general principles. Much will depend upon the recognition of complications and the intelligent treatment of them. Obviously, whether complications exist or not, the

situation demands as much rest as can be obtained for the cardiac muscle.

During the acute attack two important features are observed; namely, the terrific painful discomfort and the state of shock. How is the pain to be relieved? This is one condition in which very large doses of morphine are justified. The initial dose may be one-half grain. The morphine not only aids in relieving the pain but also helps to produce mental and bodily rest. Nitroglycerin may be tried but should not be used if the systolic blood pressure is 100 mm. or lower. Very occasionally light ether anesthesia may be justified to relieve the pain. Shock in coronary thrombosis is to be managed much the same as when found in other conditions, except that stimulation is to be avoided if the peripheral blood pressure is sufficient to maintain adequate circulation. A systolic blood pressure of 100 mm. of mercury is usually taken as a criterion of sufficiency. If the pulse is imperceptible, caffeine-sodiobenzoate 0.5 to 1 gram may be given intravenously; or strophanthin 1 milligram intravenously; or adrenalin 0.5 c.c. intramuscularly may be used. In general, intravenous therapy, such as fluids in large amounts, is to be avoided as a greatly increased volume of fluid injected directly into the blood stream may embarrass the circulation still further. The body should be kept warm by blankets, hot-water bottles, or other forms of local application.

A very important caution is to do nothing that will cause the patient any muscular exertion. He should not be allowed to attempt even to turn himself or to get up from the position where he has fallen. Certainly he should not be allowed to walk, and it may be wise to put him at rest temporarily on the spot where he collapses, if at home, or moved with the greatest care, and without so much exertion as the moving of a hand, on the part of the patient. Such slight exertion at that particular time may deprive him of the chance to live. The physician should refrain from elaborate examination, and visitors are to be restricted.

The patient has passed through the attack of pain and is fairly comfortable at rest in bed. The period of recovery varies greatly in individual cases, and anywhere along this period any one or more complications may arise. During this time the hazard may be likened to that of sitting on a bomb that may explode any minute. What is the plan of

management now? Absolute bed rest still is imperative. How quiet should he be and for how long? He should remain as quiet as possible for several days. The continued use of morphine may be justified for several days; however, in many instances the common sedatives, such as bromide, or luminal, may suffice. He should be spared the effort of feeding himself for the period of three days to one week. He should not have to use the bed pan more than once daily; slight constipation is a desirable occurrence during the first few days. This may actually occur as part of the effect of the morphine used. How long should the patient remain at rest in bed? For at least one month, and preferably for six to eight weeks. Under no circumstance should compromise allow him up before the end of one month. Rupture of the heart may happen up to the end of the second week or even later after the onset; I have seen sudden death upon sitting up in bed for ten minutes at the end of three weeks after the attack.

During the period of recovery little in the way of treatment, other than that described above, is necessary unless complications arise. The common complications of coronary thrombosis may be grouped as follows: disturbances in cardiac rhythm; mural thrombosis of the heart chambers with or without dislodgment of a piece of thrombus and resultant embolism in a remote part of the body; fibrinous pericarditis; rupture of the heart; acute pulmonary edema; and circulatory insufficiency with all the findings of congestive heart failure.

The very nature of the primary underlying process makes one of many arrhythmias possible. Varying degrees of heart block may occur; possibly only a simple delay in conduction time resulting in regular heart rhythm without the blocking of beats, or actual partial or complete heart block may occur. Ventricular extrasystoles are common. Auricular fibrillation, especially of the paroxysmal type, is fairly frequent. In the series of cases reported by Levine and Brown⁵ there was no indication that any one of these three types of arrhythmia influenced the general prognosis. A most important arrhythmia, however, is ventricular tachycardia, either paroxysmal or persistent, and intelligent treatment of this condition may be life saving. The presence of ventricular tachycardia indicates serious prognosis.

There is not time or space here for considering the diagnosis of these cardiac arrhythmias. However, it seems worth while to mention some of the features that may help to differentiate ventricular tachycardia from auricular tachycardia at the bedside. Careful auscultation over the precordium for a long period of time likely will reveal that in the main the rhythm is regular, but at intervals a slight irregularity may be detected in ventricular tachycardia, whereas in auricular tachycardia the rhythm is constantly regular. Ventricular tachycardia is uninfluenced by vagal pressure, while auricular tachycardia may be entirely arrested and auricular flutter temporarily slowed by vagal pressure.

The discussion of the treatment of the arrhythmias here may be limited to the consideration of heart block, auricular fibrillation, and ventricular tachycardia. Partial heart block may demand no special therapy. If complete block occurs it may be unaccompanied by any severe symptoms. If the block is accompanied by the symptoms of Adams-Stokes syndrome, adrenalin or barium chloride may be used. Adrenalin 0.5 c.c. may be injected intramuscularly, and repeated as necessary. In rare emergency where there is long heart pause 0.5 c.c. of adrenalin may be given directly into the heart. If attacks of Adams-Stokes syndrome are frequent, barium chloride 30 milligrams may be given three or four times a day, by mouth. For a more lengthy discussion of the beneficial effects of barium chloride in this type of arrhythmia the article of Cohn and Levine should be consulted.⁶

Paroxysmal auricular fibrillation may not be accompanied by any symptoms. If attended by evidence of circulatory insufficiency, the proper measures to support circulation should be employed, such as digitalis and caffeine. Persistent auricular fibrillation demands proper digitalization.

The development of ventricular tachycardia is serious because the severely injured heart cannot maintain long at the rate of 150 to 200. Quinidine has been found effective in this complication of coronary thrombosis. It is a dangerous drug and should be used with the same caution here as in any other instance. As high as 1.5 gram of quinidin sulphate was given five times in twenty-four hours before normal rhythm was established in a case reported by Levine and Fulton.⁷

When mural thrombosis develops in the ventricular chambers of the heart, embolism may occur in the peripheral or pulmonary circulation, depending on whether the mural thrombus is in the right or left ventricle. When these catastrophes occur there is little to offer in the nature of treatment, other than general supportive measures. The same may be said for the management of rupture of the heart. Apparently spontaneous rupture of the heart always is fatal in a very short time.

Acute pulmonary edema occasionally occurs, and when it does is most likely during the early days of the attack. The usual measures are employed here, the same as when acute pulmonary edema is encountered under other circumstances. If cyanosis is a prominent feature oxygen is apparently of some value.

In the management of congestive heart failure complicating coronary thrombosis, the same general measures employed in other types of heart disease may be followed, namely absolute bed rest, limitation of fluids, and the adequate administration of digitalis. The indications for diuretics and phlebotomy are the same here as in other instances of congestive failure. Congestive heart failure is encountered most often two weeks or more after the onset of the attack. This is fortunate because probably it is much safer to use digitalis at that time than it is during the first few days of the attack. This brings up a point on which all physicians do not agree; namely, the use of digitalis in the treatment of coronary thrombosis. The author has felt that it is desirable to avoid the use of digitalis during the first few days following the attack unless

some special indication appears. Stimulation of the tremendously damaged heart during the early days seems surely more hazardous to the patient than stimulation at a later date when some degree of healing has taken place. Quite aside from the undesirability of stimulating the heart at that time, little can be expected from digitalis under the circumstances that prevail during the acute attack when the heart action is regular and the rate is normal or moderately accelerated. Also there is evidence of irritability of the heart muscle in coronary thrombosis in that ventricular tachycardia occasionally develops. It seems undesirable to give digitalis at this time because of the possibility of irritating further an already irritable heart muscle.

SUMMARY

The clinical features of coronary thrombosis, particularly those of diagnostic importance, are reviewed briefly. Special emphasis is given to the treatment, and the consideration is taken up under three divisions: (1) Treatment of the acute attack. (2) Management during recovery. (3) Management of complications.

BIBLIOGRAPHY

1. Obrastzow, W. P., and Straschesko, N. D.: Zur Kenntnis der Thrombose der Koronararterien des Herzens. *Ztschr. f. Klin. Med.*, Berl., LXXI:116, 1910.
2. Herrick, J. B.: Clinical features of sudden obstruction of the coronary arteries. *J. A. M. A.*, 59:2015, 1912.
3. Wearn, J. T.: Thrombosis of the coronary arteries, with infarction of the heart. *American Journal Medical Sciences*, 165:250, 1923.
4. Hamman, L.: Symptoms of coronary occlusion. *Johns Hopkins Hospital Bulletin*, 38:273, 1926.
5. Levine, S. A., and Brown, C. L.: Coronary thrombosis: Its various clinical features. *Medicine* VIII: 245, 1929.
6. Cohn, A. E., and Levine, S. A.: The beneficial effects of barium chloride on Adams-Stokes disease. *Arch. Int. Med.*, 36:1, 1925.
7. Levine, S. A., and Fulton, M. N.: The effect of quinidin sulphate on ventricular tachycardia. *J. A. M. A.*, 92:1162, 1929.

VITAL HORMONE REVIVES PROSTRATED ANIMALS

Studies with cortin, the vital hormone, were described by Dr. Frank A. Hartman, of the University of Buffalo, at the Detroit meeting of the Association for the Study of Internal Secretions. This hormone comes from the cortex of the adrenal glands. Animals from which both adrenal glands have been removed live a normal existence indefinitely if injected with cortin. Cats with both adrenals removed live an average of not more than eleven days if untreated. Prominent symptoms in these animals are loss of appetite, loss of weight and a lack of interest in their surroundings. The treated animals eat as much as or more than normal, gain weight,

play and fight. They recover from wounds and resist infections and show all the reactions of healthy animals. It has been possible to revive animals which were near death after removal of the adrenal glands by injection of the vital hormone. In a little more than an hour after the treatment, one animal sat up and in two hours was eating.

The cortin on which Dr. Hartman reported was prepared so as to be nearly free from epinephrin. This hormone is secreted by the medulla, that part of the adrenal gland which is not the cortex. Epinephrin has a strong restorative action itself, but animals can live without epinephrin or the part of the gland that secretes it, while they cannot live without the cortical part of the gland and its secretion.—Science Service.

THE RÔLE OF RHINOLARYNGOLOGY IN THE TREATMENT OF BRONCHIAL ASTHMA*

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The symptom-complex called asthma has long been a baffling problem to medical science and still demands of us every possible resource which we may command as an aid in relieving this distressed group of people. It is, therefore, paramount to have the closest teamwork between the internist and those specialties having a direct bearing on the subject. Speaking as a rhinologist, one feels that it is impossible to disregard the nose and throat in the survey of a patient complaining of bronchial asthma.

That we may have a common understanding of this symptom-complex, a classification is in order. This has come to be pretty generally the same where anyone has made such an attempt. However, the best grouping encountered was that recently given by Rackemann and Tobey.¹ They divided the asthmas into extrinsic, intrinsic and unclassified—the extrinsic including mainly the pollens and animal groups, and the intrinsic the bacterial infections and the nasal reflex types. To this classification, we have added a mixed group composed of the extrinsic and the intrinsic types, since some people are unfortunate enough to possess both. In our recent review of 746 cases of bronchial asthma at the Henry Ford Hospital Clinic, there were 310 extrinsic, 295 intrinsic, 124 mixed and 61 unclassified; the latter referring to incomplete data and cases with no demonstrable allergy or focal infection. It will be noted that the so-called cardiac group is purposely omitted from this classification.

No attempt is made in this discussion to present other than the rhinological aspect of this problem. Consequently the intrinsic group of focal infections in the nose and throat and the nasal reflex syndrome will command our attention.

We are attempting to answer, from the results obtained from this study and the experience of others, that ever momentous question: Does surgery in the nose and throat do any good in certain types of asthma, and is the service of the rhinologist worth anything to the internist and the patient in solving the difficulty?

At the outset, a fact must be recognized, that there is a definite reflex between the nasal mucous membrane and the musculature of the bronchi. To quote Sluder: "The sympathetic nerve supply in the nose is derived from the nasal ganglion. This receives its sympathetic supply from the vidian nerve, the great deep petrosal, the carotid plexus, and the superior cervical ganglion." Dixon and Brodie² have demonstrated that the vagus carried constrictor and dilator fibers to the muscles of the bronchi, and that stimulation by the galvanic current in the nose brought about the contraction of the bronchial muscles. Francis³ has used the galvano-cautery to the septum to relieve asthma. Every rhinologist of experience has at some time or another relieved an attack of asthma by cocaineization of the nasal mucosa in the region of Meckel's ganglion. While we recognize this nasal reflex syndrome as a definite entity, yet from the standpoint of its practicability with respect to nasal deformities, middle turbinate contacts and small polypi, we have not found that it worked to any appreciable extent in asthma when the above conditions were treated or corrected. If any results were obtained it seemed more reasonable to assume that better nasal drainage was the result and less bacterial infection absorbed.

Infection of the paranasal sinuses is the most fruitful source of bacterial asthma. Just why more people who have sinus disease do not have asthma one cannot answer, any more than he can the peculiarities of allergy. Polyposis is the outstanding feature of the sinus disease in adults. It is rarely seen in children. Polyposis far outshadows

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any pus formation; in fact there may be little or none of the latter demonstrable in many cases. Occasionally one encounters a simple empyema of the maxillary sinuses

7 clear; one of the latter washed pus. Some of these when X-rayed presented a questionable diagnosis which became clear when lipiodol plates were taken. An example of

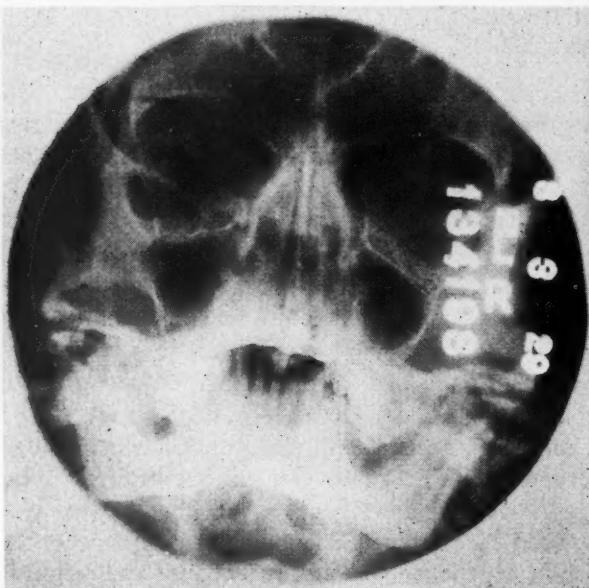


Figure 1. Plate taken before lipiodol was injected. The maxillary sinuses are not very definitely positive. They were only hazy to transillumination.

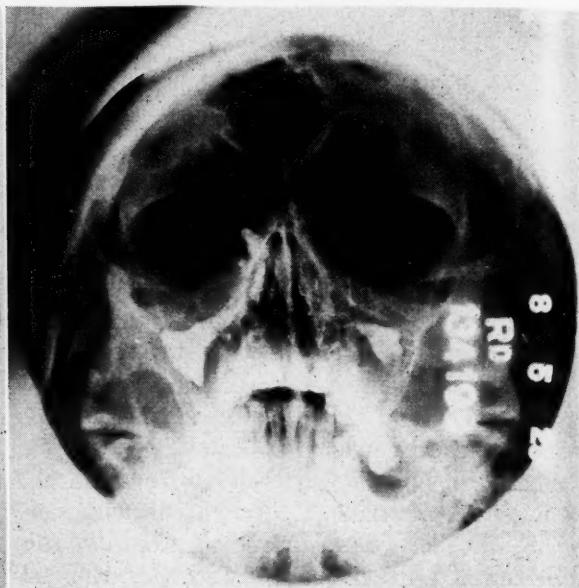


Figure 2. Very striking filling defects in both maxillary sinuses. At operation these cavities were filled with polypi.

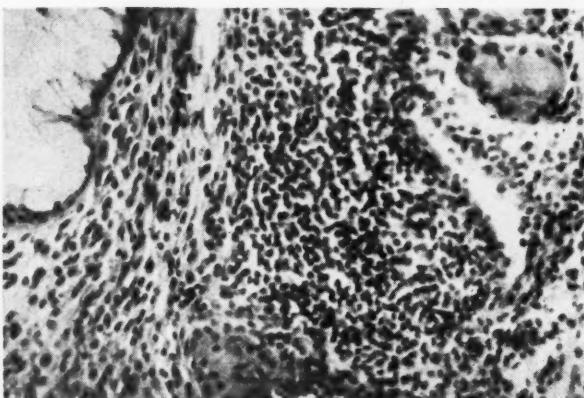


Figure 3. Microphotograph of polypoid tissue from the antrum of an asthmatic showing the increase of eosinophiles.

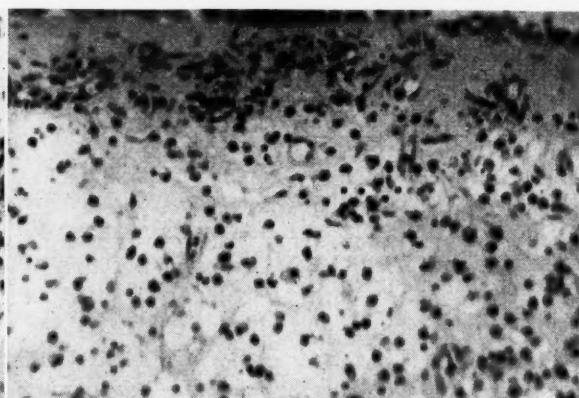


Figure 4. Microphotograph of the tissue from a chronic maxillary sinus of a patient without asthma.

without polypoid degeneration, but this is not the rule. The diagnosis of polyposis or edematosus within a sinus has been greatly facilitated by the introduction of an opaque medium such as lipiodol into the sinus in question. This is of special advantage where the ordinary X-ray plate presents a doubtful picture.

In the 746 cases here reported, 164 had cloudy maxillary sinuses to transillumination. Of these 106 washed clear, and 59 returned pus; 96 were cloudy in X-ray and

this is shown in the accompany illustrations (Figs. 1 and 2).

This polypoid tissue seen in the above plate when examined microscopically showed a marked increase in eosinophiles. This has been noted by other observers. A contrast is shown between the mucous membrane of a chronic maxillary sinus without asthma and one with it.

We have not applied Sewall's cytology to antrum washings in relation to asthma cases, but, as experience grows, less atten-

tion is paid to sinus washings showing little or nothing and more to lipiodol studies.

THE SURGICAL TREATMENT OF THE
INTRINSIC AND MIXED GROUPS
OF ASTHMAS

OPERATIONS	Worse	No Improvement	Moderate Improvement	Great Improvement	Not Reported
Tonsillectomies	13	7	6	2	
T & A	2	2	1		
Submucous	2	5	9		
Maxillary	12	21	9	2	
Max-Ethmoid	1	4	7	7	
Ethmoid	1	1	1		
Max-Eth-Sph	1	1	3		
Eth-Sphenoid	2	0	0		
Pan-Sinusitis	3	2	0		
Max-Washings	0	4	4		
Tampons	0	3	2		
Polyps-Turbs	2	3	1		
Total	1	42	56	43	

Chart 1. The number of operations and results on 116 patients.

It is our opinion from a study of 116 cases in the above groups that surgery in the nose and throat does benefit in a sufficient number of patients to warrant the procedure. Dundas Grant⁵ in a recent review of his cases reported great improvement in 39 per cent, some improvement in 42 per cent and no improvement in the remaining 19 per cent. Rackemann and Tobey give about the same end-result in 1,074 cases of all types of asthma. Mathews⁶ found that 90 per cent of 300 asthmatics had the etiological lesion in the upper respiratory tract and that treatment was successful in proportion to free and continuous drainage. In our series, one was made worse, 30 not improved, 42 moderately improved, and 43 greatly improved. All in the last group were free of asthma one year or longer; some of these might be considered cured for they have been without asthma as long as four years. However, we prefer to avoid the term cured in such a problem as asthma, remembering that some cases may go a number of years quite independently of medical care before having another attack.

We were struck with the slight benefit derived from tonsillectomy. This was more manifest in first-hand study of the records than in the above chart. However, one very striking case of quinsy was followed by asthma; the latter disappeared on proper disposal of the tonsils. Simple empyema of the maxillary sinuses brought some fascinating results just from washing alone, these mainly in younger people. Submucous

resection in properly selected cases is of value mainly in providing better drainage. The pure maxillary sinusitis with polyposis has been the most gratifying, but when associated with ethmoiditis the results have been least fruitful. Whether the bacterial protein in these sinus cases is the trigger mechanism, or the pathological changes it has produced, we are unable to answer; but surely from the results shown here and the reports of others, the removal of these pathological changes in the nose—whether purely hyperplastic or bacterial or both—does benefit in over 50 per cent of the cases. Without the removal of either or both of these above offending agents, hopes for improvement cannot be expected. 43 cases in the bacterial sinus group were not operated upon where operation was indicated but refused, and none of these improved even though vaccines were given.

COMMENT

It has been our contention that palliative measures in adults have rarely been worthwhile. When there is obvious disease in the nose in an asthmatic patient radical procedure is in order. This will obviate that frequently repeated expression, "too many nasal operations." We are assuming, however, that the proper diagnosis has been made and that unnecessary and non-essential minor operations have been excluded. Every rhinologist who is fair to himself and his colleagues will admit that he has to occasionally reopen maxillary sinuses done by the Caldwell-Luc method and may relieve his patient by taking out only a small area of granulations or recurrent polypi. We are never sure of obliterating the ethmoidal labyrinth, especially by the intranasal route. This makes it occasionally necessary to do the external operation. We must face the fact that our asthmatics will not get along well as long as there is inadequate drainage or diseased tissue remaining; hence, additional operations often become necessary. This is frequently the result of a fresh cold that lights up an otherwise quiescent condition.

It has been our observation that the greatest improvement is to be expected in those who have had asthma less than five years, and who are below the fifth decade.

Up to the present little has been said relative to asthma in children, but it has been our experience that palliative measures, such

as suction, tampons, and occasionally washing of maxillary sinuses have been of definite benefit.

CONCLUSIONS

In conclusion, we believe that whereas some patients are not improved, and occasionally one may be made worse, the great majority receive some benefit from nasal surgery, and those familiar with asthmatics will certainly agree that any improvement is decidedly worth while.

Every asthmatic should receive a careful nose and throat examination.

There should be the closest coöperation between internist and rhinologist in the treatment of bacterial asthma.

Over half of our series of cases were bacterial or mixed in character.

Sufficient improvement is obtained from nose and throat surgery to justify such procedure in all cases showing pathology in the nose and throat.

BIBLIOGRAPHY

1. Rackemann, F. M., and Tobey, H. G.: Studies in asthma. *Arch. of Otolaryng.*, Vol. 9, June 1929.
2. Dixon and Brodie: The pathology of asthma. *Trans. of the Path. Soc.*, London, Vol. LIV.
3. Francis, A.: Nasal treatment of asthma. *Lancet*, October 18, 1902, Vol. II, 1053.
4. Sewall, C. E., and Hunnicutt, Leland: Cytology examination of the antrum. *Arch. of Otolaryng.*, Vol. 10, July, 1929.
5. Dundas, Grant J.: Nasal disease in relation to asthma. *Practitioner*, 119:341, 1927.
6. Mathews, J.: Anaphylaxis and asthma. *Med. Rec.*, 84:572, 1913.

TUBERCULOSIS IN CHILDHOOD

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Tuberculosis in childhood has as many forms as it has in adults. It attacks as many different organs and has perhaps more clinical variations. There are distinct differences in its behavior and the diagnosis, prognosis and treatment differ considerably from those in adult life. The study of the disease in childhood has been somewhat confused in the past because few physicians consider all aspects of tuberculosis, and those interested in tuberculosis have not been entirely familiar with the peculiarities of the disease as seen in childhood. Some misconceptions and false teachings have arisen due to these different points of view and have clouded the understanding of the medical profession. For example, a majority of physicians believe that the tuberculin tests mean nothing after early infancy and that most children are infected in the first few years of life, and practically all by puberty. Such views handicap us in the treatment of tuberculous children because they start with a false conception of the importance of infection with tuberculosis. It is practically impossible to discuss the whole subject in a short paper, therefore merely the most important phases may be touched upon.

In the first place, the bacillus is inhaled or ingested by the child and a lone lesion results somewhere in the body, generally in the tonsils, adenoids, lungs, or intestines. The regional lymph nodes then become affected in a short time. These local lymph

nodes are poor filters and some bacilli always reach the lymph stream, and then through the blood stream are carried to the lungs. In the lungs, they are again taken out into the lymphatics by phagocytes and are carried to the bronchial lymph nodes. Therefore, the latter are nearly always involved at an early stage, even when the primary lesion is elsewhere than in the lungs.

The further course depends upon the resistance of the child. The disease in the regional or bronchial nodes may heal by fibrosis. It may become latent or encapsulated. It may go on actively. It may extend to further nodes in the chain, to adjacent structures, or to distant parts through the lymph or blood streams (bowels, meninges, lungs, etc.). In other words tuberculosis becomes cured, latent or goes on to activity and extension.

Much, if not all, tuberculosis begins in childhood. We do not at present know whether the adolescent disease is a lighting up of an old process or a new superimposed

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infection. In either case, childhood is the most important age period in the history of the disease because it is the true incipient stage, the very beginning of all tuberculosis.

A great many children are infected early and show no signs nor symptoms because the initial lesion is small and the local or bronchial nodes are able to handle the disease, which remains latent or perhaps is cured. Other children go on to develop active tuberculosis in some organ where it can be recognized. But in both cases there has been a tuberculous infection and no one can tell whether it is under control or smoldering along, waiting to flare up. Therefore both should be attended to with the same respect, the infected children as well as those with manifest evidences of the disease. The danger in the terms "infection" and "disease" lies in the indifference of the profession to the seriousness of the infection and to the belief that all children are infected. This idea is based on the early figures of Hamburger and Pirquet from Vienna, notoriously the most tuberculous city in the world. American statistics are far different and show less than half the incidence found in Europe and within recent years the reaction to tuberculin is becoming less and less. If we accept the common view that a positive tuberculin reaction means nothing (except in infancy) we lose our greatest opportunity of combating the disease in its inmost stronghold, when we have our best chance of wiping it out. We must make the diagnosis as soon after infection takes place as possible, before activity and extension begin, and not wait until important or vital organs are attacked by tuberculous disease.

Infants who become infected are only occasionally able to resist the disease and generally go on to activity, extension, and death from general miliary, pulmonary, or meningeal tuberculosis. They, therefore, ought to be protected from contact with tubercular patients. The latent stage occurs mostly in older children over two years. When we come to make a diagnosis of tuberculosis on these children, we must bear chiefly in mind that we are not seeking pulmonary but rather lymphatic tuberculosis. Lung signs are infrequent and, if present, denotes a very late stage. In making a diagnosis with tuberculosis in mind, we must answer three questions:

1. Has the child been infected with tuberculosis?

2. Is the disease active, latent, or cured?
3. What is the site of the disease?

The first question is answered by the tuberculin skin reactions in the majority of the cases. A positive reaction merely means that a child has been infected at some time in his life, that is, that the tubercle bacillus has lived and grown in his body. That is all the information that the tuberculin reaction gives to us. It answers only one question: has the child been infected?

In passing, I might mention that the intradermal tuberculin reaction is at least twice as accurate as the Von Pirquet, but has the single disadvantage that the solution must be freshly prepared.

If a child reacts to tuberculin, then the second question must be answered: is the disease active? This is told by general rather than local signs. These are:

1. Fever—an irregular temperature over 100 degrees Fahrenheit, in rectum.
2. Languor, easy fatigue, anorexia, etc., are frequently reasons for bringing the child to the physician.
3. Malnutrition or failure to gain weight may be the only symptoms.
4. Anemia or increasing pallor are often noted by the parents.

The above symptoms may be the only evidence of activity for there may be no physical signs nor symptoms of lung involvement.

The site of the disease offers greater difficulties even when it is active and fairly extensive. In disease involving the meninges, bones, joints, peritoneum, or pleura, the diagnosis is seldom long obscured and need not be considered here. Pulmonary tuberculosis is seen in two main types in childhood. In infants, it starts from the hilus as a rule and extends rapidly outward to cause an infiltration or massive consolidation of the lung. The second variety is that seen in considerably older children in whom the disease more clearly approaches the adult type. Pulmonary involvement is rare between the ages of two and ten. If there are evidences of lung pathology between the ages of two and ten, a careful search will show that it is caused by a focus of infection in the upper respiratory tract. Lymphatic disease is by far the most common type. The cervical nodes are easy of access for examination, the mesenteric nodes may be felt or shown by X-ray, but the bronchial nodes, the most common site of localization,

no matter where the initial lesion is located, offer difficulties. They give few signs at best and may give none at all even though large. The only signs of value are dullness on percussion and the D'Espine sign. This sign (a tracheal whisper heard *after* the spoken voice) may be present normally over the cervical and upper dorsal vertebrae. It is positive if heard below the second dorsal vertebra. This sign in the past offered a subject for debate as to its value, but statistics have quite conclusively proved that the sign is positive in the great majority of cases that react to tuberculin.

When we have made the diagnosis that the child has been infected and have decided whether the disease is active or not from the general symptoms, we have gone as far as possible in many cases. The site of the lesion offers the greatest difficulties. But after all, if we can rule out active disease of vital organs, we can treat the patient with intelligence and try to keep him from ever developing recognizable disease. The X-ray corroborates our findings of the site of the lesion. Ofttimes it discovers the site of the lesions where our physical findings give us no clue. The interpretation of the plates of the chest I leave to the roentgenologist. But in passing, I would suggest that, in taking the plates of the chest in suspected patients, a lateral view be included.

The treatment of a child with tuberculosis is much like that of an adult, always remem-

bering that we are dealing with a child. He needs a regime, hygiene, and diet quite different from that of adults in health as well as disease. We should keep certain principles definitely in mind. If there is activity (fever, no gain in weight, etc.) rest in bed is essential, with proper feeding, air, light, etc. If a child has no fever and is gaining and growing well, his disease is probably latent and he needs merely the care and regime of a normal child plus a little extra care. He should be protected especially from excessive fatigue, and rest after lunch is essential. Cod-liver oil is certainly indicated. Every effort should be made to keep up the nutrition, which is our best guide to resistance. The weight curve must be watched just as carefully as the temperature curve in a child known to be infected, as activity is thereby suspected. Ultra-violet light is indicated if the site of lesion is in the glands and should not be used when the parenchyma of the lungs are involved.

Tuberculosis is not a universal infection but on the decline, in this country, at least. We must learn to recognize and treat it in its early or latent stages in childhood when we have our greatest hope of curing the individual and stamping out the disease. Children have a fairly good resistance normally and if watched and cared for will generally conquer the infection if they escape the meningeal, bone, and other accidents which cannot be foreseen.

CHILD'S MENTAL HEALTH IS CONCERN OF MANY GROUPS

Neither parents nor teachers nor doctors nor any other single group is entirely responsible for the mental health of the child, members of the American Medical Association were told at their annual session in Detroit. "It should be the concern and intelligent interest of doctor, teacher, parent, psychologist, clergy, psychiatrist, social worker, public health nurse and every other constructive force of our social organization that comes in contact with the welfare of children," said Dr. Esther Loring Richards, of the Johns Hopkins University School of Medicine.

One of the commonest causes of maladjustment resulting in mental or nervous disturbance is a discrepancy between the child's ability and what is demanded of him at home and school, Dr. Richards said. Very often a child is "bad" or "nervous" because of poor training in emotional as well as physi-

cal habits. Physical defects handicap a child mentally and emotionally as well, and much of this handicap could be avoided by better treatment at home, at school, in industry and in social relations.

Unwholesome social conditions are too often overlooked as the cause of strain on children and they are much more difficult to remedy than physical ailments. Studies of adults who break in middle life are teaching physicians a great deal about the temperamental equipment of childhood; some children are equipped to stand the strain of life well, while others seem to have their nervous systems put together the wrong way.

Another important aspect of the mental health of childhood is the need for outlets for energy in the form of play and well directed recreation. Physicians are constantly confronted with patients who have broken under the strain of life and in studying them there invariably appears a lifelong inability to relax.—Science Service.

HORMONE INFLUENCE IN RICKETS*

PRELIMINARY REPORT

DR. M. BOYD KAY,
ICIE G. MACY, PH.D., and
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To everyone who has carefully observed rickets must have come the thought that more than just chemical and vitaminic deficiency has contributed to this widespread condition of infancy and childhood.

For example, let me offer this specific demonstration of the fact that other elements must be contributory. Twins that I was able to watch from birth to late childhood present these interesting facts. One child, a girl, grew to be a perfect specimen. The boy, on the other hand, became one of the most advanced cases of rickets I have ever observed. One must know, first of all, that there was a history of rickets in the maternal progenitor. I mention this in passing, to bring to your attention the possibility of so-called congenital rickets.

Now, this is the important thing in the case. In spite of the fact that the boy was handled in exactly the same fashion as the girl by an intelligent mother, two entirely different individuals developed. The feeding was exactly the same in both cases. One large formula supplied the food for both during infancy. Feeding during early childhood also was identical, both receiving the same amount of cod liver oil and the amount was what is considered sufficient. Both enjoyed the same good hygienic care, and in spite of it the boy became the horrible case of rickets.

The question arises: How does such a thing occur, and upon what basis is it to be explained? In our clinic at the Children's Hospital of Michigan, many cases of cretinism pass before our gaze. I was struck from time to time by what seemed to me to be a resemblance of the facies in certain cases of both diseases. This stimulated the thought that thyroid deficiency also can contribute to the clinical entity we describe as rickets. Assuming that this might be the case, we proceeded with a study in animals (white rats) that had beyond a question of a doubt been given rickets. Our procedure was a very simple one. Rats previously given rickets were kept on a rachitogenic diet, the only addition being thyroid extract in varying quantities in the different colonies of rats. The thyroid extract was prepared by a high class pharmaceutical firm, and we were assured these products contained no

parathyroid gland. The feeding both before and after the addition of thyroid to the rachitic diet was in the hands of highly trained and experienced workers in a nutritional chemistry.

As you know, two elements will contribute to the healing of rickets in rats where no treatment has been instituted. The first and most important element is time. Rats allowed to go beyond a certain period of days will, in spite of the fact that rachitic diet has been continued, show upon post-mortem examination spontaneous healing, no anti-rachitic measure having been resorted to.

The other important element is loss of weight due to starvation. Every animal in this experiment took during the period under observation a sufficient quantity of food. In under-fed rats, one also gets spontaneous healing. Every effort was made to eliminate these factors. Time we could easily control. Loss of weight was beyond our control, but was never due to starvation. I shall not at this time burden you with a description of the living conditions of the animals. All animals were killed at the end of the same day period. At the very outset, we were faced with the problem of how much thyroid to feed. We could find no data that could offer satisfactory information on this point, so we started with the largest amount that the individual animal or colonies could take. In all, ten groups were included in this experiment. The accompanying chart prepared by one of us will show clearly our results.

SUMMARY

1. Rachitic rats kept on a rachitogenic diet to which only thyroid gland has been added show healing by the line test.

*From the Nutrition Research Laboratory of the Merrill Palmer School and Children's Hospital of Michigan.

EFFECT OF THYROID ON RICKETS IN RATS

Series Number	Lot Number	No. of Animals		Dosage Thyroid Powder Mgm.	Change in Weight on Thyroid	Healing (Line Test)	REMARKS
		Exptl.	Control				
VI	1	5		100	Lost	4+ ^c	One discontinued. Received rachitogenic diet 5 days before thyroid was started. Two died after 9 days on thyroid, 1 after 13 days. Two discontinued as unsatisfactory.
V	1	4	1 pos. ^a	32	Lost	1+ 1? 2—	Positive control died after 5 days on thyroid powder.
IV	1	4	1 pos. 1 neg. ^b	16	Lost	3+ 1— ^d	Positive control died after 3 days on thyroid. Anemic and hemorrhagic.
III	1	4	1 pos. 1 neg.	8	Lost	3— 1+	
II	1	4	1 pos. 1 neg.	4	Lost	4+	Positive control died after 4 days, cold, quivering, gasping for breath.
I	1	4	1 pos. 1 neg.	2	Lost	1+ 3—	Positive control died on 9th day.
VII	2	5	1 pos. 2 neg.	0.8	2 lost 3 gained slightly	5+	One negative control Showed healing
	3	6	1 pos. 3 neg.	0.8	Gained	6+	One negative control Showed healing
	4	5	2 neg.	0.8	Gained	5+	One negative control Showed healing
VIII	1	6	3 neg.	0.6	Gained	6—	One negative control Showed healing
	2	5	3 pos. 2 neg.	0.6	Gained	5+	One negative control Showed healing
IX	1	5	5 neg. 1 pos.	0.4	Gained	4— 1+	
X	1	5	5 neg. 1 pos.	0.2	Gained	3— 2+	
	13	62	12 pos. 27 neg.	TOTALS			

a. pos. designates positive control animal which received both cod liver oil and thyroid.

b. neg. designates negative control animal which received only the rachitogenic diet.

c. + = healing.

d. — = no healing.

NOTES

Series II-VI inclusive received the Macy and Outhouse rachitogenic diet for eighteen days and then thyroid was added for eight days more.

Series VII-X received the McCollum 3143 rachitogenic diet for twenty-one days and thyroid was added for seven days more.

2. The dose of thyroid for rats seems fairly well established. The "hormone" seems to have a curative effect in rickets.

TECHNIC OF LINE PROCEDURE

Since evidence of rickets develops at a different rate in the various bones, first in the ribs, next in the femur and tibia, and

later in other bones, it was decided to section the tibia for microscopic examination, this being a convenient member to deal with, and one showing early developments of rachitic condition. Moreover, by the time changes were in evidence in the tibia, changes would have set in in the femur too, so that it would be safe to interpret chemi-

RATIONS USED IN STUDIES ON THE EFFECT OF THYROID ON RICKETS IN RATS

Macy and Outhouse^a

	grams
Egg albumin	18.00
Yeast	6.00
Dextrin	71.75
H_3PO_4	0.10
$CaCO_3$	1.55
Salt mixture XXX ^c	2.60
Butter fat, 3 drops daily	
Ca — .622 grams per 100 grams	
P = .125 grams	ration
Ca/P = 5	

McCollum 3143^b

	grams
Soft Wheat	33
Maize	33
Gelatin	15
Wheat Gluten	15
NaCl	1
$CaCO_3$	3

Twice optimal calcium content. Decidedly below optimum content of phosphorus.

Ca/P = 4

a. Outhouse, J., Macy, I. G., Brekke, V.: *J. Biol. Chem.*, 1928, 78:132.

b. McCollum, E. V., Simmonds, Nina, Shipley, P. G., Park, E. A.: *J. Biol. Chem.*, 1921, 57:510.

c. Osborne and Mendel Salt Mixture XXX.

First published in footnote 3, page 132 of reference (a) above. It contains:

	grams		grams
$MgCO_3$	21.80	Fe Citrate	
$NaCO_3$	30.10	11/2 H_2O	6.34
K_2CO_3	118.60	KI	0.020
HCl	95.30	$MnSO_4$	0.079
H_2SO_4	9.20	NaF	0.248
Citric Acid, H_2O	30.60	$K_2Al_2(SO_4)_2$	0.0245

cal analysis of that bone as indicative of the condition in a rachitic bone.

The tibiae were dissected from the tissue and a median longitudinal section made with a sharp scalpel, the two halves of each bone being immersed immediately in 1.0 per cent silver nitrate solution, the clean cut surfaces being uppermost. Light from a carbon arc lamp was focused for 1 to 2 minutes upon these immersed surfaces, and under this light examination of the bones made under a binocular microscope. Calcium deposits in the bone showed up distinctly black, bony trabeculae and calcification in the provisional zone of calcification being therefore distinct.

(Sections were decolorized by immersion for two minutes in 1 per cent sodium thiosulphate which would dissolve any black precipitate of silver salts but leaves the black calcium line untouched in order

to be sure the black deposit represented calcification. C. F. S.)

The objective of highest power being used, a fairly detailed histological picture was obtained, it being possible to see in particular the arrangement of cells in the proliferative cartilage, and the calcium deposition (where present) between the cells of this zone. Bones giving a picture of active rickets are recorded as negative with regard to the line test. Such bones showed in the epiphyseal region, the cartilage band, with proliferation of cartilage cells toward the diaphyseal region; this proliferative zone dipped down in jagged strands due to invasion by sprouts of blood vessels. Immediately adjacent to this zone was a region free of calcification, a distinct metaphysis, lying, therefore, between the diaphyseal and epiphyseal region.

Such was the nature of the bone picture in the great majority of the control cases, where rats had been kept on Diet 3143 for the 21 to 29 day periods. When cod liver oil was added to the ration, healing of the rachitic lesion began; that is, calcium salts began to deposit, and the normal structure of the bone began to be assumed again.

Normally, healing may commence by deposition of calcium salts (chiefly phosphates) between the cells of the provisional zone of calcification. The zone of proliferative cartilage cells becomes narrower and of straighter, smoother margin and gradually the metaphysis becomes calcified. Changes such as those just described were seen to have taken place in the bones of those animals having had the cod liver oil incorporated in the ration after 21 days of Diet 3143. This deposition of salts in the provisional zone of calcification gave rise to a narrow black line (as seen under the microscope), the line being broken at times (since deposition started at several points at once), and at other times continuous, but of various widths in different cases, depending upon the degree of calcification.

REFERENCES

1. Adams, Georgian, and McCollum, E. V., Department of Biochemistry, School of Hygiene and Public Health, Johns Hopkins University: A Method for the Biological Assay of Cod Liver Oil. *Jour. Biol. Chem.*, 1928, LXXVIII, No. 2, 507.
2. The original description of "line test" will be found in paper by McCollum, et al, *Jour. Biol. Chem.*, 1922, 51:41.

SUB-ARACHNOID ANESTHESIA*

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To Dr. George P. Pitkin, of Hackensack, N. J., the medical world owes a debt of gratitude because of his contribution of spinocain anesthesia to modern surgery. He has been an untiring worker, and has spent years perfecting the solution and developing the proper technic for its administration. Improvements made in the technic of administration and in the chemical agents used to produce spinal anesthesia will help to reinstate this form of anesthesia in the armamentarium of the average surgeon. Methods have been evolved which will allow the operator to control the blood pressure definitely, and also the height of the anesthetic in the spinal canal. Having mastered the control of the blood pressure and the control of the height of the anesthetic in the spinal canal, the two principal objections to the use of spinal anesthesia have been removed.

Jonnesco¹ used stovain with strychnin to prevent the depression of nerve centers to produce anesthesia as high as the neck. He states: "Even in the hands of the most experienced this method is still very dangerous, and the death rate is one to five hundred. The drug once injected is beyond the control of the surgeon."

Corning² in 1885 discovered that cocaine injected between the spines of the eleventh and twelfth dorsal vertebræ produced anesthesia of the lower limbs. Bier produced complete anesthesia of the entire body except the head by the injection of small amounts of cocaine in the sub-arachnoid space of the cord. Carbolic acid in small amounts must be added because the cocaine cannot be sterilized by heat. Phenol may produce harmful results. Tropococaine was brought out and it is boilable but is much slower in action.

Mr. Arthur Barker,³ England, believed that the specific gravity of the anesthetic solution played an important part in the localization of the anesthesia in the canal. DaCosta⁴ states that he has used stovain in a number of instances, and the anesthesia lasted for an hour or more and was followed by retention of urine in his cases.

Dandois⁵ reports that a case upon which he operated for traumatic rupture of the urethra, in which cocaine was employed, developed a paraplegia which lasted for two months.

Epsom salts was introduced by Blake,⁶

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Haubold and Willie Meyer, and the anesthetic was slow in action and the anesthesia lasted from eight to fourteen hours. Blood pressure was unaffected, but life was endangered by embarrassment of the respiration.

Of the more recent investigators, Stout of Wisconsin uses novocain crystals and they are successful in his hands. He uses a method which he calls "Volume Control." The extent of the anesthesia is dependent upon the speed of injection and the volume of anesthetic injected into the canal. He uses ephedrin to control blood pressure.

Dr. Frank Kelly, of Detroit, who introduced the Pitkin Method in Michigan, states that the objections to spinal anesthesia in the past have been: lack of controllability, the transitory character of the anesthetic and the severe fall in blood pressure, which made the operators feel that spinal anesthesia should not be used in patients where blood pressure was below 100 mm. systolic.

The transitory anesthesia is overcome when using the Pitkin solution because of its viscosity; when it is injected into the spinal canal it remains in a homogeneous form, is absorbed slowly and does not diffuse in all directions. The blood pressure drop is controlled by the use of *intramuscular* injections of ephedrin.

Spinocain has a lighter specific gravity than the spinal fluid, hence the height and location of the anesthesia may be determined by proper tilting of the table, and the mixing of the spinocain with the spinal fluid. The mixing is called "expansion" of the anesthetic agent.

Spinocain solution, when used with the proper technic, insures one of a method whereby he can definitely control the extent of the anesthesia in different parts of the body, but it is not advocated for anesthesia

above costal arch. Spinocain is in my estimation the safest of the spinal anesthetics at the present time.

The novocain crystals are successful in the hands of the trained surgeon. It has been my experience that before the advent of ephedrin the patient must be kept in a moderate Fowler's position to prevent a wide diffusion of the anesthesia. When cerebral anemia occurs the physiological procedure to follow would be to place the patient in Trendelenburg position to overcome shock.

Kelly suggests that an intercostal block be used in conjunction with spinocain when operating on the gall bladder, and it is a valuable adjunct for this type of surgical intervention.

INDICATIONS

Having used spinocain for every operation below the costal arch—these include cholecystectomies, gastro-enterostomies, appendectomies, hernias, cesarean section, rectal operations, prostatectomies, leg amputations, and fractures—we find a complete flaccid relaxation of the muscles and bowels. This relaxation is very striking in rectal operations, for the rectum is completely relaxed and almost everted, and the rectal pathology is easily accessible.

Results in fractures have been very satisfactory for there is such a complete relaxation of the muscles. In reducing fractures of the femur the fragments can be palpated and placed in alignment in most cases. In fractures of the lower extremities the bones may be molded in position with the fingers because the muscles offer no resistance.

When doing abdominal operations it is not necessary to traumatize the bowels by forcibly packing them back with towels for there is no extrusion of the viscera through the incision.

Spinocain has been used on patients as old as eighty years and as young as two months. We have used it on patients who have been unable to take a general anesthetic and some of these patients were practically moribund. Patients who have a high vascular tension and those with sclerosed vessels are not given ephedrin because there is little variation in blood pressure during the operation.

Dr. E. G. Martin, of Detroit, has proven to my satisfaction that barbital is an antidote for possible novocain idiosyncrasies,

and I feel more secure when the patients receive the preliminary barbital medication when using novocain in the spinal canal or in the tissues.

Again I wish to mention that an ephedrin solution must be given intramuscularly to obtain a prompt elevation of blood pressure. We push fluids before, during, and after operation, and we feel that we eliminate the customary vomiting which results from the inhalant anesthesia acidosis. Postoperative ileus and peritonitis, when dealt with under ether nitrous oxide, ethylene, or other forms of inhalant anesthetics, cause unpleasant experiences to follow because of the ballooning of the intestines through the incision.

Under spinal anesthesia we have the opposite effect on the intestines, and it has been our experience that fifty per cent of the postoperative ileus symptoms will become non-surgical when the patient is given a spinal injection. The abdomen flattens and the patient is able to expel flatus freely.

CONTRA-INDICATIONS

Personally we do not feel that there are any contra-indications for use of spinocain if the patient is operable. The low blood pressure fear has been eliminated, and, as was stated before, the patients who are practically moribund will withstand the anesthetic.

TECHNIC

1. Barbital: Grains 5 the night before operation.
2. Barbital: Grains 10 one hour before operation.
3. Morphine: Grains 1/6 and scopolamin, grains 1/20th one-half hour before operation.
4. Position of patient lateral decubitus, knees flexed on abdomen.
5. Skin preparation: alcohol and five per cent tincture of iodine.
6. Spinous processes mapped out with alcohol sponge to detect curvatures of the spine.
7. Ephedrin-novocain solution with an additional 2 c.c. of one per cent novocain injected into the skin and through the spinous ligament.
8. Skin punctured with sharp blade to allow the blunt Pitkin needle free access.
9. A 20- or 22-gauge Pitkin spinal needle is introduced until a click is felt, and when a click is felt, clear spinal fluid be-

gins to drip, the spinocain solution is then injected.

10. The patient is kept in a lateral position until the height of the anesthesia is defined, and then the patient is placed on his back and the table tilted in a slight Trendelenburg position.

For operations below the umbilicus the point of entry is at the fourth lumbar interspace, and the solution is mixed or expanded twice, using 2 c.c. of the spinal fluid with each expansion.

For operations in the perineal region, make the injection at the fourth lumbar interspace and tilt the table in a 20° Trendelenburg position.

The point of entrance for gall bladder or stomach operations is at the twelfth dorsal or first lumbar, and the spinocain is expanded or mixed three times. After the anesthesia has reached its proper height a five degree Trendelenburg is used. Gall bladder operations will be facilitated by an intercostal block of the 8th, 9th, 10th and 11th intercostal nerves. This is done by injecting 2 c.c. of one per cent novocain solution at the inferior border of the ribs.

When the anesthesia is too high and the patient complains that he cannot breathe, tilt the table in marked Trendelenburg and tell him not to attempt to breathe or get excited and he will breathe naturally. The assistant who records the blood pressure readings can materially lessen the nervousness of the patient by reassuring him that he is perfectly safe.

The blood pressure readings should be checked at intervals, and experience teaches one that you can estimate the relative blood pressure by the character of the blood, the bleeding, and the general appearance of the patient. Absence of bleeding indicates a very low blood pressure and immediate measures must be taken to restore vascular tension to a point of safety.

Postoperative headache is easily controlled with some of the coal tar products.

Nausea and vomiting, when they occur, are controlled by lowering the patient's head and giving a $\frac{3}{4}$ grain dose of ephedrin (Lilly), or an ampule of the ephedrin-novocain solution.

Since spinal anesthesia blocks sensation in the field of operation, we find the absence of nausea and vomiting, which are almost ever-present after inhaled anesthesia. The suture line is protected and possible post-operative hernia and other complications are prevented.

CONCLUSIONS

Radical improvements in the technic of administration, nature of the solution used, and the definite controllable features of the anesthetic agent and blood pressure give us reasonable assurance that the use of spinal anesthesia in skilled hands for general surgery will become more universal.

Spinocain is the anesthetic of choice in any case that is operable below the costal arch because of its safety and controllability at all times. The method is commendable for surgeons because patients become entirely relaxed and postoperative complications are lessened.

Fluids pushed before and after operations overcome dehydration and prevent acidosis, which in turn lowers mortality.

In closing I wish to thank Dr. George P. Pitkin for the use of his lantern slides and his ever ready coöperation.

I wish to thank Dr. Frank Kelly, of Detroit, for his very valuable instructions, and for the unselfish manner in which he gave me the benefits of his experiences when I started to use spinocain.

BIBLIOGRAPHY

1. Jonnesco: Wabasee, Vol. I, p. 161.
2. Corning: New York Med. Jour., Oct. 31, 1885.
3. Barker: British Med. Jour., March 16, 1912.
4. DaCosta: Modern Surgery, 1914, p. 1223.
5. Dandios: Modern Surgery, 1914, p. 1223.
6. Blake: Haubold and Meyer. Amer. Med., Nov. 25, 1905.
7. Stout: Amer. Jour. of Surgery, July, 1929.
8. Kelly: Year Book, N. Y. and New England Ry. Surgeons, 1928.
9. Martin: Journal A. M. A., 1929.
10. Bier: (Neugenbauer) "Wien, Klin-Woch," 190, Nos. 50-51.

THE CAUSES OF FAILURE OF THE POLLEN TREATMENT FOR HAY FEVER

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Nearly every physician who has used pollen extracts for prophylactic treatment of hay fever, has had cases refractory to this treatment. Even as thorough and experienced allergists as Ramirez,¹ Cooke and Van der Veer,² and Rackemann³ have encountered 10 to 15 per cent failures with this method of treatment. Judging from the skepticism of patients as well as of many physicians toward this treatment, one is led to believe that this percentage of failures is by far exceeded in the practice of those who are less experienced with this treatment than the above men.

There are several reasons for this fact. It is true failures cannot always be prevented with the present state of our knowledge. Nevertheless, if we follow certain principles, the patients can be given reasonable assurance of the success of this treatment. It is the aim of this paper to outline these principles.

DIAGNOSIS

Not infrequently, merely the diagnosis, "pollen hay fever," may be the source of the failure of the treatment. How important it is to distinguish the pollen rhinitis from other forms of vasomotor rhinitis, such as the one due to foods and to inhalants other than pollens, is well illustrated by the following case:

Mr. P. A. R., 32 years old, has been suffering from hay fever for 13 years. Symptoms appeared regularly about the middle of August, a fact which pointed to ragweed sensitiveness. He had no relief from the ordinary pollen treatment, consisting of short and giant ragweed and cocklebur, which was administered as indicated by the skin tests. His history pointed to sensitiveness to plums, canteloupe, and watermelon. Skin tests done outside of the hay fever season were negative, but when done during the season, large reactions with these foods were encountered. It is likely that the pollen sensitiveness in this patient brought on a multiple sensitiveness to foods during the hay fever season.

This explains the inadequacy of the pollen treatment. In other cases aggravation of hay fever symptoms at night could distinctly be traced to multiple sensitiveness, namely, to feathers and horse hair. Simultaneous administration of these extracts in addition to the pollen treatment has relieved patients who in former years were refractory to the treatment.

†Dr. Waldott graduated at University of Heidelberg, Germany, in 1920; interned at Frankfurt and Heidelberg Hospitals, and at Henry Ford Hospital, Detroit. His specialty is allergy. He is in charge of allergy clinics at Grace, Children's Hospital and North End Clinic, Detroit. He is a member of the Society for the Study of Allergy, American College of Physicians and Michigan Academy of Art, Letters and Science.

INADEQUATE CHOICE OF POLLENS

One of the most common reasons for not obtaining results is the inadequate choice of pollens. Frequently a standard form of treatment with a standard combination of pollens is used for every patient without considering the pollens to which the individual is sensitive. Negative skin tests may lead the physician not to use all the pollens which the patient requires. It is well to bear in mind that skin reactions by the scratch method do not always reflect sensitivity of the mucous membranes. It is frequently necessary to resort to intracutaneous tests to ascertain the causative pollens.

Mr. R. B., 22 years old, who has been an asthmatic for 10 years and under my observation for three years, has always had the most severe attacks in September and October. Among skin tests made with concentrated solutions of many pollens no positive reaction was obtained. However, on account of the characteristic onset of hay fever symptoms, on August 23, which were followed by asthma, he was given giant and short ragweed injections in June, July and August, 1929. During the entire season he had no symptoms whatever.

Moreover, we may not have sufficient knowledge of the hay fever flora of the vicinity and thus important hay fever producing plants may have escaped our attention. Nearly every year new varieties of pollens are being described in various localities as causing hay fever. In 1929 a thorough survey of the hay fever situation in Detroit has been conducted on which a report will be given in a subsequent paper.

INSUFFICIENT TREATMENT

If the pollen causing the patient's symptoms has been determined and prophylactic treatment instituted, there are two reasons for the failure to prevent symptoms: impotent extracts and insufficient final dosage. Formerly, alcoholic and salt solution ex-

tracts, which lose their potency very rapidly, were used. This accounted for insufficient treatment in many instances. Since now the extracts of most commercial houses are prepared with Coca's Solution, which stabilizes the strength of the extract, this cause has been eliminated. Nevertheless, it is advisable to have fresh extracts on hand when giving the treatment. Cold storage of extracts is very essential.

In desensitizing patients sensitive to several pollens, I usually use a mixture containing all of these pollens in a percentage corresponding to the size of the skin reactions. For instance, if the patient gives a four plus intradermal reaction to short ragweed, two plus to cocklebur, and a two plus to marsh elder, the extract prepared for him will contain 50 per cent short ragweed, 25 per cent cocklebur, and 25 per cent marshelder. A standardized treatment with the same pollens for every patient has not given such satisfactory results as has this method.

The result of the treatment is dependent on the final total maximum dose which we are able to reach before the expected onset of the season. While in some patients, 1,000 to 2,000 pollen units may suffice, it is usually necessary to give larger amounts. In certain cases we have to go to as high as 50,000 to 100,000 units in order to obtain freedom from symptoms. These doses exceed by far the ones usually recommended by commercial houses; if given carefully, they achieve success. Of course, the greatest caution is necessary when employing concentrated extracts, in order to prevent severe reactions. To this effect, more frequent injections (25 to 50) may have to be resorted to, instead of the customary 12 to 15 dose treatment.

It is advisable to continue the treatment with the final dose during the season by weekly injections, in order to maintain the protection afforded by this dose, throughout the season.

CO-SEASONAL TREATMENT

If the patient is too late for the pre-seasonal treatment, he may be given the treatment during the time while the symptoms are present. This treatment consists of one or two injections a day. The doses have to be well gauged and the patient thoroughly watched, since during the season the patient is usually more sensitive to the pollens than at other times. Reactions,

therefore, may occur more frequently. It is generally admitted that this treatment is not as satisfactory as the pre-seasonal treatment.

POLLEN ASTHMA

There are many patients whose hay fever is associated with asthma. Usually toward the end of the season, as their nasal sensitization improves, the bronchial mucous membranes manifest more pronounced allergic changes. These patients are successfully treated if they complete the pollen injections before the season starts. If the injections are given while asthmatic symptoms are already present, the asthma often becomes worse. I saw several patients last year who were not relieved with the doses ordinarily recommended, but were completely free from symptoms during this season, when much larger amounts of pollen were given.

REACTIONS

A local reaction from an injection is the kind that usually causes little discomfort, although it may bring about a swelling of the arm to twice its size. The constitutional reaction may give rise to alarming symptoms. It usually occurs inside of one hour after the injection, with a severe sneezing, dry cough, shortness of breath, and the eruption of urticaria which habitually begins at the site of injection and spreads all over the body.

Investigation has disclosed four reasons for the occurrence of such a reaction. First, the injection of larger doses than the patient can tolerate, or a too sudden increase in concentration; second, the accidental introduction of the extract into the vein; third, the change to a fresher and more powerful extract; fourth, the simultaneous sensitiveness to pollens and other substances such as certain foods with which the individual has come in contact at the time of injection. The worst reaction which I have witnessed occurred in an individual who had eaten fish to which he was sensitive, just previous to the injection of ragweed. Former administrations of ragweed extract had never produced any ill effects. Reactions following intravenous injections are characterized by their immediate onset and by the fact that no local swelling on the site of reaction can be detected. An injection of 0.5 c.c. of epinephrin may ward off more serious trouble. The placing of a tourniquet about the arm above the site of the injection, and

the simultaneous administration of epinephrin in the other arm, can be successfully applied.

In order to restrict the occurrence of reactions, I have given the injections in fractional doses. For instance, the short ragweed was administered in the morning and the giant ragweed in the afternoon. Among 2,414 injections given in 1929 to 142 patients, there were only 29 constitutional reactions.

PERMANENT PROTECTION

Although a patient may become free of hay fever at any time, the protection of the pollen treatment is only seasonal and has to be repeated every year. Attempts have been made to secure a permanent protection from

hay fever by continuing the treatment throughout the year, at the rate of about one to two injections a month. It will take several years before conclusive data on this question will be available to the profession.

SUMMARY

In summarizing, I wish to emphasize my belief that failures with the pollen extract treatment for hay fever can be entirely eliminated if the correct pollen is chosen and the final maximum dosis is sufficient.

REFERENCES

1. Ramirez, M. A.: Statistical report on the treatment of hay fever. *Amer. Jour. Med. Sci.*, 176:856, 1928.
2. Van der Veer, A., Jr.; Cooke, R. A., and Spain, W. C.: Diagnosis and treatment of seasonal hay fever. *Amer. Jour. Med. Sci.*, 144:101, 1927.
3. Rackemann, F.: Results of specific treatment of late hay fever. *Jour. Immun.*, Febr., 1926, 81.

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SOME OBSERVATIONS ON ANESTHESIA IN OBSTETRICS

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Probably some apology should be made for choosing a subject about which so much has appeared in the literature and over which so much discussion has arisen. However, with the purpose in mind of reviewing the various methods at hand, some of the objections and advantages of each, and a discussion as to how much should be done to relieve the suffering of the parturient, the choice of such a subject can be justified.

The extensive investigation of the subject of anesthesia naturally turns in course of time to the field of obstetrics. The last few years have seen the elaboration and introduction of several new methods or the re-introduction of methods formerly discarded, and their use in obstetrics advocated. The amelioration of labor pains is an important field of study, and certainly a popular one with the patient, but certain limits of safety and many indications and contra-indications must be observed, or the effort to reduce pain becomes an instrument of destruction. Furthermore the indiscriminate or routine use of any one method results in failure as often as success, and methods of value fall into disuse from abuse.

Anesthesia in obstetrics has somewhat different requirements than elsewhere in medicine and it seems best to outline those requirements at the start. They are briefly as follows:

1. Maternal safety must be assured,

this being a requirement common to all anesthetics.

2. Fetal life must not be endangered or sacrificed.
3. Wide adaptability to varying conditions is desirable.
4. Labor must not be materially affected.
5. Relaxation of the perineal muscles should be obtained.
6. The anesthesia should be readily controllable.
7. The expense should be nominal.

No one of the methods in vogue at present seems to meet all of the above requirements, nor does any method completely mitigate the pains of labor and it is not probable or desirable that childbirth will ever be made absolutely painless. A comparison of the various methods in vogue with the above principles is of more than passing interest.

The accoucheur is offered a wide variety of more or less well tried methods which

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vary from analgesia to surgical anesthesia. Some methods are designed to begin fairly early when labor is fully established, others are brought into play late in the second stage, and the means of administration vary from hypodermic injection, intravenous injection, rectal instillation, injection into the subarachnoid space, or inhalation. Each method has its advocates, each has been extensively tried, and yet each has indications and contraindications with which all must be familiar before a final choice is made.

All comparisons between various types of anesthetics made in this paper are restricted to the conduct of normal labor. Where any one method is especially applicable an effort will be made to emphasize that point in the later discussion.

As a rule the pains during the first stage of labor are not unbearable, and it is only in the occasional patient that means must be instituted to relieve them. From the complete dilatation of the cervix to the passage of the head over the perineum the pains reach the greatest intensity. However, measures for the relief of the occasional patient during the first stage of labor must be considered.

There are several measures intended to be instituted during the first stage, the first of these being morphine-scopolamin analgesia, incorrectly called "twilight sleep" by some who recall the elaborate fanfare and newspaper campaign of 1913 and 1914 which popularized the method with the laity. Morphine sulphate in $\frac{1}{4}$ gr. doses combined with 1/200 gr. of scopolamin hydrobromate was used, the scopolamin being repeated one or more times depending upon the mental condition of the patient. An elaborate technic involving darkened, sound-proof rooms to obviate the possibility of any external stimuli affecting the patient, was part of the treatment. Modifications of this are still in use today, and undoubtedly it has resulted in much good. The best its enthusiasts can claim for it is that it may shorten the first stage, but the second stage is prolonged, with a possible increase in the incidence of surgical interference. The method is not successful in all cases, many patients require mechanical restraint and there is an increased fetal mortality estimated at variable figures of from one to two per cent.

It violates the fundamental principles elaborated earlier in the paper by materially increasing the fetal mortality, it is restricted

in its adaptability being confined almost entirely to hospital practice, and requiring the constant attendance of the physician, and by prolonging labor. The increased toll of dead babies is the bar to success here, but the utter collapse of its previous popularity is the best indication of its ultimate fate as a routine measure.

Definite contra-indications to morphine-scopolamin analgesia are: idiosyncrasy to scopolamin, primary uterine atony, cephalopelvic disproportions, weak fetal heart tones. Modifications of this method can be of distinct value in the treatment of posterior positions of the occiput, or maternal exhaustion where no cephalopelvic disproportion exists.

The induction of analgesia during the first stage includes the Gwathmey method, which has also enjoyed abundant popularity recently. The method of injection of morphine and magnesium sulphate hypodermically, followed by the rectal instillation of ether, oil and quinine is so familiar that it need not be described here.

Labor has undoubtedly been freed of some of its sufferings by this method, yet its application as a routine measure to all cases has resulted in many unfortunate incidents so that now its use can only be justified in a few selected cases and there the method is frequently modified. Narcosis of the fetus, pulmonary irritation, diarrhea, and quinine reaction have followed its use. More apparatus is required than the demands of home practice permit. Once the instillation is made, the anesthesia becomes uncontrollable and the anxious attendant can only wait and hope that all will be well eventually.

A more recent development has been the use of spinal anesthesia as advocated by Pitkin, using a solution of novocain in a vehicle of heavier specific gravity than the spinal fluid. There are certain technical difficulties of making the spinal puncture and postural treatment following the injection which, unless thoroughly understood, causes many failures, and even fatalities. The duration of the anesthesia is rather short, which makes its use early in the first stage unadvisable. Labor is apt to be prolonged as the abdominal muscles lose their role in aiding expulsion. The relaxation secured will often obviate episiotomy, but for the above reasons it is not a method well adapted to general use.

Among the inhalation anesthetics we have the oldest and best known methods, as well as some of the newer attempts. Chloroform enjoys an historical prestige, of which it is justly deserving, for certainly its discovery was one of the greatest benefactions ever made to mankind. Whether or not its historical associations account for its hold upon some practitioners, especially the older men of the profession, one can hardly say. Its small bulk and rapidity of action are overshadowed by its primary and delayed toxicity. The toxemias of pregnancy constitute a distinct barrier to its use. The use of chloroform probably should not be abolished entirely from obstetrics for in certain cases such as Bandl's contraction ring, its use sometimes produces the relaxation necessary to effect delivery when other means are contra-indicated or fail.

The most recent developments have been along the type of gas inhalants. Ethylene has passed into the discard because of its explosive qualities. Until the danger of explosion can be eliminated, which cannot be assured at the present time, it must remain in spite of its otherwise excellent qualities a forbidden agent for the relief of pain.

The place of nitrous oxide-oxygen anesthesia in obstetrics is still in the debatable stage. Certainly because of the expense, the cumbersome apparatus necessary and the training essential for its proper administration, its use outside of the hospital is almost negligible. In clinic practice, few institutions have a trained anesthetist available for twenty-four hour duty in obstetrical work. The administration usually is prolonged if analgesia is attempted early, and the expense as compared with ether is of some consequence. But more than that, the relaxation which can be secured with nitrous oxide anesthesia does not compare with that usually obtained with ether. Poor relaxation means not only an increase in the frequency of perineal lacerations with increased morbidity, but an increase in fetal accidents. Often the nitrous-oxide anesthesia, through the poor relaxation, is the only impediment to an otherwise normal, uncomplicated birth. When available, nitrous-oxide-oxygen is useful for very short anesthetics for repair of perineal or cervical lacerations. The speed with which the patient reacts and the absence of severe post-anesthetic symptoms are far more comfortable to the parturient than ether.

In the present state of medical science ether probably occupies the place of greatest adaptability, if not that of greatest safety. While its bulk is greater than chloroform, its toxicity is much less, and in the absence of existing upper respiratory infections, which should make its use contraindicated, its sequelæ are few. For the practitioner in the home, its limits of safety are such that it can be given by an inexperienced person under the direction of the accoucheur, and yet assure the patient of mitigation of the pain and relaxation of the perineal musculature for the delivery. If the administration of ether with the pains has been started early enough only a little increase is necessary while the head is being delivered to secure complete anesthesia. The expense is certainly small. Probably ether today enjoys the most widespread popularity of all types of anesthesia at our command.

There are numerous other medicaments and procedures recommended for the alleviation of labor pains. In fact, methods are legion. The above covers the fairly well recognized procedures, and the others are usually modifications or variations.

So much for the weapons; now for the important question of how much should the obstetrician do to relieve pain? I mean no disrespect for the woman of today when I say that she bears pain poorly when compared to her sisters of bygone days. The problems of the obstetrician are complicated by the fact that the mothers and grandmothers of the present generation are loudest in their demands that something be done to relieve the laboring woman of her terrible suffering. Modern hospitals have made operative obstetrics comparatively safe. Too often because operative interference is so safe, the demands of the family so insistent, and the sympathy of the attendant aroused to the point that his judgment is overwhelmed, so much is done to relieve labor that disaster results to the baby. Following the first shock of grief, the doctor is still more stunned to find himself the target of the excoriating remarks of the persons who were most insistent that something be done.

If the anesthetic is too profound the intensity of the labor pain is so altered that labor ceases to progress. Thereupon follows an operative procedure from which the woman may eventually recover, but such practices must materially contribute to the

present excessive mortality and morbidity rates of this country. It is my opinion that the decrease in obstetric deaths from puerperal sepsis that occurred in the days of septic medicine are more than counterbalanced by the deaths which occur during the present era of asepsis due to the increased incidence of operative interference so that the maternal death rate remains at comparatively the same level that existed fifty years ago.

If operative procedures are not undertaken, the harmful effects of the anesthetic cause fetal accidents. Depression of the fetal respiratory center as a result of deep maternal narcosis is responsible for the deaths of many infants annually which might otherwise have been saved. The use of nitrous-oxide is alleged by some to change the blood in such a manner that the clotting time is altered. In case of slight intracranial hemorrhage the bleeding resulting after the use of nitrous-oxide may be fatal.

Under certain anesthetics, nitrous-oxide for instance, relaxation of the perineal muscles is definitely diminished. This results in more frequent lacerations, more episiotomies, more infections, and more accidents to the fetal skull. My plea, then, is to do less to alleviate labor pains, in the hope of avoiding accidents, of making operations less frequent, of preventing infections. I freely admit that the obstetrician is censured for not doing enough. Often the doctor who does the most to control the pains has the largest practice and incidentally the highest fetal mortality, but the censure in the opposite direction and after accidents occur should be equally as severe.

In managing labor the physician should carefully consider several cardinal principles before the final selection of a method is made. Most important is the matter of risk the patient must undergo to secure a desired result. Obviously the risk to the fetus must enter into this consideration so that the child must not be needlessly sacrificed to save the mother from pain, yet the maternal organism cannot be wholly ignored. Where an inhalation anesthetic is contra-indicated by a constitutional condition and its use would entail more risk, another method should be selected which will eliminate that danger.

One of the great curses of medicine is the habit of routine. For all their similarity no two accouchements are exactly alike, and an attempt to apply one type of anesthesia over and over again results in as many disasters as if no anesthesia at all were used. An enthusiast for rectal analgesia may be so blind to individual variations as to make his results just as unsatisfactory as the man who through indolence clings tenaciously year after year to some other method, come what may.

Let the anesthetic fit the case, not the case the anesthetic. One may still be very conservative in obstetrics, do much to relieve suffering and yet have many strings in his fiddle.

The cost of medical treatment is a popular subject of lay and professional comment at present. I want to mention the matter of expense of the anesthetic used in obstetrics only to say that it is one point wherein the doctor, by using a little consideration, can help to meet criticism. I do not suggest for a minute the use of ether, simply because it is less expensive, where its use is contraindicated, but all other things being equal, the end-results the same, the matter of expense should be given some weight. Simply the habit of the doctor is not enough to warrant the routine use of an expensive method, where some less expensive will answer just as well.

In conclusion, the various means of ameliorating labor pains at our command are numerous and diversified, but all must meet certain requirements, or they become instruments of harm. Their application should not increase the risk of mother or child, labor should not be affected, relaxation should be obtained, and the expense of administration nominal. Greatest success will be obtained by diversity of method to fit variations as they arise; only in this way can parturition be robbed of its greatest dread, pain. My plea is that less be done to relieve this suffering than is now the popular practice in the hope of avoiding unnecessary operations and of ultimately lowering our present high death rate and morbidity in obstetrics.

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THE TREATMENT OF HAY FEVER BY ANTERIOR ETHMOIDAL INJECTION*

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The distinction between the so called seasonal and non-seasonal or allergic and non-allergic types of hay fever loses interest if our treatment is by nerve injection, for this procedure applies equally well to both. Without knowing the mechanism whereby a pollen or other allergic substance may result in the symptoms of hay fever, we do know that injection of a strategic nerve, so as to make it impervious to the passage of nerve currents, breaks a necessary link in the chain of causation and prevents the manifestation of hay fever symptoms even though the allergic substance be present in abundance. Even in those cases which show no reference to season, and of which the cause is unknown, we find that injection of the strategic nerve breaks the causal connection and prevents the manifestation of hay fever symptoms.

Asthma, however, should be carefully distinguished from hay fever. Perhaps the most constant symptom of hay fever is the excessive sneezing, though other symptoms usually present in varying combinations are weeping, engorgement of the nasal mucosa, and itching or burning of the nose and eyes. Frequently associated with hay fever are varying degrees of dyspnea, ranging all the way from a barely perceptible tightness in the chest to frank and almost unbearable asthma. To consider all of these respiratory manifestations as one and the same disease is a common error of the lay mind, sometimes even tincturing the professional viewpoint. *That they are clearly separable is shown by the fact that injection of the strategic anterior ethmoidal nerve may and usually does relieve the hay fever without affecting the asthma.* It should be noted that in cases in which the asthmatic attack is uniformly preceded by an attack of hay fever the cessation of hay fever effected by this procedure results in a cessation of the asthmatic attacks; but this does not lessen the validity of the distinction between the two affections.

HISTORY OF THE ANTERIOR ETHMOIDAL INJECTION

Nerve injection for the relief of hay fever was reported by Otto Stein† as far back

as 1908. Stein not only injected the "branches of the sphenopalatine ganglion where they emerge from the sphenopalatine foramen" but also the nasal nerve where it dips down into the nasal chamber through the cribriform plate.

In 1924 Payne reported 43 cases of hay fever treated by sphenopalatine injection, with results ranging all the way from complete relief to complete failure. The writer, having experienced a similar diversity of results from alcohol injection of the sphenopalatine ganglion, in 1927 supplemented the procedure by injection of the nasal nerve, and, without knowing of Stein's injection, partly duplicated his procedure. Even this combination, however, including injection of both sphenopalatine ganglia and both nasal nerves, although increasing the percentage of successes, nevertheless in a few cases failed to relieve the symptoms. For a time it was thought that these failures were due to faulty technic in the injection itself, and in some cases this was undoubtedly true. But at length it became apparent that failures were encountered which could not be readily dismissed as due to faulty technic. It seemed incontrovertible that there was some leak in the innervation of the nasal region not shut off by this method. Careful dissections were now made in the attempt to find this leak. In these dissections were found what I have not seen mentioned in any anatomy consulted: a number of fine nerve filaments given off in the three quarters of an inch between the point where the nerve leaves the orbit through the anterior ethmoidal foramen, and where, after passing through the ethmoid cells, it dips down through the cribriform plate into the nasal chamber. There seemed every reason to believe that these fibers constituted

*Read before the East Side Medical Society, Detroit, June 12, 1930. From the Jefferson Clinic and Diagnostic Hospital. For professional note: see April, 1930, Journal, p. 296. Just before going to press we have received word of the death of Dr. Hiram Byrd, which took place on July 20th.

†Sluder, G.: *Nasal Neurology, Headaches and Eye Disorders*, The C. V. Mosby Co., St. Louis, 1927.

the leak we had failed to stop, and that an injection via the orbit at the point where the nerve enters the anterior ethmoidal foramen, that is, an injection of what is called the *anterior ethmoidal nerve*, would solve the problem.

Injection into the orbit, using novocain, was not a new procedure, and indeed the injection of alcohol was not without precedent. Quoting from Forchheimer's "Therapeutics of Internal Diseases," Vol. IV, p. 353, Levy and Baudoin, "in rare cases in which injection at the supra-orbital notch (for the relief of neuralgias) does not give good results, have injected the frontal and lachrymal branches by passing a needle along the external wall of the orbit." This, however, seems to have been little more than a surgical excursion, for it is related by Howell T. Pershing with no comment except that "One naturally shrinks from invading the orbit with alcohol."

It was at first supposed that injecting the anterior ethmoidal nerve at this more proximal point would merely replace the injection of the nasal nerve and would be useful simply as a supplementary procedure to injection of the sphenopalatine ganglion for hay fever. Subsequent developments, however, disclosed that the anterior ethmoidal injection is a much more dynamic measure than was first supposed, and that in a majority of cases it alone is adequate for the control of hay fever, without recourse to the sphenopalatine injection.

APPLICATION

In practical application the following should be clearly understood: that there are six points, three on each side, where injections may be made for the relief of hay fever. These are: the anterior ethmoidal nerve, injected through the orbit; the nasal nerve, a continuation of the anterior ethmoidal, injected through the nose; and the sphenopalatine ganglion, right and left. In the order of their relative importance, as shown by the percentage of cases relieved at these various points, they are: the anterior ethmoidal nerves, the sphenopalatine ganglia, and the nasal nerves. Indeed, injection of the nasal nerve should be regarded as only a supplementary procedure and employed in cases where, after injection of the anterior ethmoidal nerve or the sphenopalatine ganglion, a residuum of disturbance in the anterior portion of the nose remains.

In any given case it is desirable to achieve the maximum relief with a minimum of injection. Experience has shown that cases are not infrequent in which, by injecting a single anterior ethmoidal nerve or a single sphenopalatine ganglion, complete relief is achieved. Had we the power of selecting the most strategic point in all cases, doubtless the percentage relieved by a single injection would be greatly increased. Our practice is to begin with the worst side and with the anterior ethmoidal injection, since that has proven to be the most dynamic of these procedures. Should the first injection not afford the desired relief, then experience must serve to indicate whether the injection missed its mark, and should be attempted again, or whether a supplementary injection at what seems to be the next most likely point is in order.

With the development of this operation it has been found that not merely allergic disturbances, but that whole group of nasal manifestations embraced under such terms as *vasomotor rhinitis*, *hyperesthetic rhinitis*, *hydrorrhea*, etc., are amenable to anterior ethmoidal injection. These affections, like hay fever, were occasionally amenable to sphenopalatine injection, but with no uniformity comparable to that now obtained.

Moreover, the therapeutic approach to these affections has been simplified, for instead of operating under twilight sleep, or general anesthesia, as was formerly done, it has been found practicable to perform the anterior ethmoidal injection, and in suitable cases the sphenopalatine injection, under local anesthesia, as an office procedure.

The pain consequent to these injections is made brief (of about a minute's duration), by the addition of 1½ per cent novocain to the 95 per cent alcohol solution. In the case of the anterior ethmoidal injection, within the first 30 seconds the pain has well nigh ceased, and the patient would not be incapacitated in the slightest from his ordinary activities were it not for a temporary swelling of the tissues about the eye. This disappears, however, within about forty-eight hours.

In a series of more than a hundred injections of the anterior ethmoidal nerve the results have been uniformly gratifying, with no untoward effects except the temporary swelling, above mentioned, which is always observed, and occasionally a little muscular soreness on rotating the eye. In only two

cases has there been any intraorbital hemorrhage observed, and in both of these it was inconsequential.

DURATION OF RELIEF

Since the first of these injections was made less than a year ago, all that can be said as to duration is what may be legitimate.

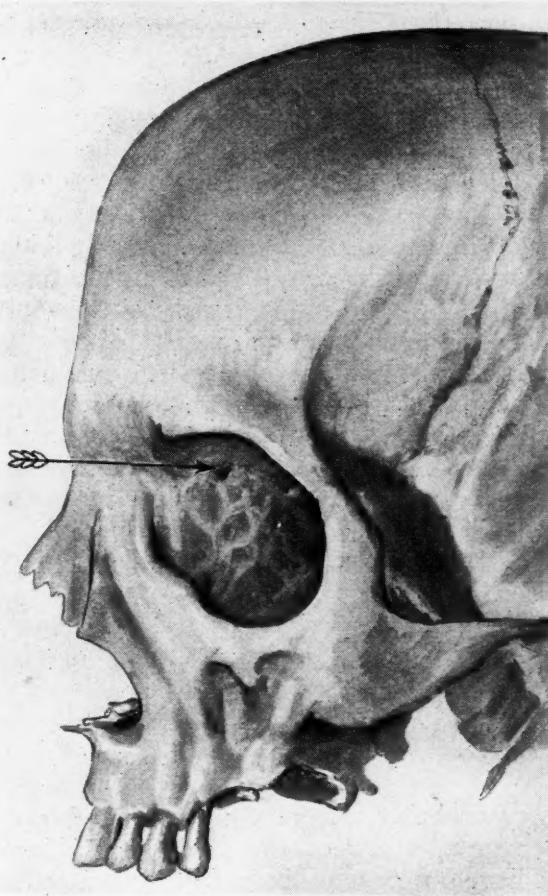


Fig. 1. Skull showing anterior ethmoidal foramen.

mately inferred from our present knowledge of the effects of nerve injections. It is now well established that injection of a nerve with alcohol is the equivalent of section or extirpation, and destroys its function for a period of about ten months or a year. In all probability, however, the accuracy with which the nerve is injected is an important factor. At the instance of Sluder, McMahon performed the following experiments:

"In a series of three dogs the supraorbital and infraorbital nerves were injected with 0.3 c.c. of saturated solution of methylene blue in 95 per cent alcohol and 5 per cent phenol. Under ether anesthesia the supraorbital nerve was injected at a point immediately medial to a small tubercle at the junction of the internal and middle thirds of the supraorbital ridge. The nerve was found at this point by dissection later. The infraorbital nerve was injected through the infraorbital canal. After 10

minutes the dogs were killed with ether. Dogs 1 and 2 were dissected immediately and Dog 3 after 24 hours.

"In the first two experiments with the supraorbital nerve injection the solution was found in the loose areolar tissue of the orbital fossa immediately adjacent to the supraorbital nerve. The needle apparently failed to penetrate the sheath. In the third experiment the results were the same except that the solution had slightly penetrated the nerve sheath on one side.

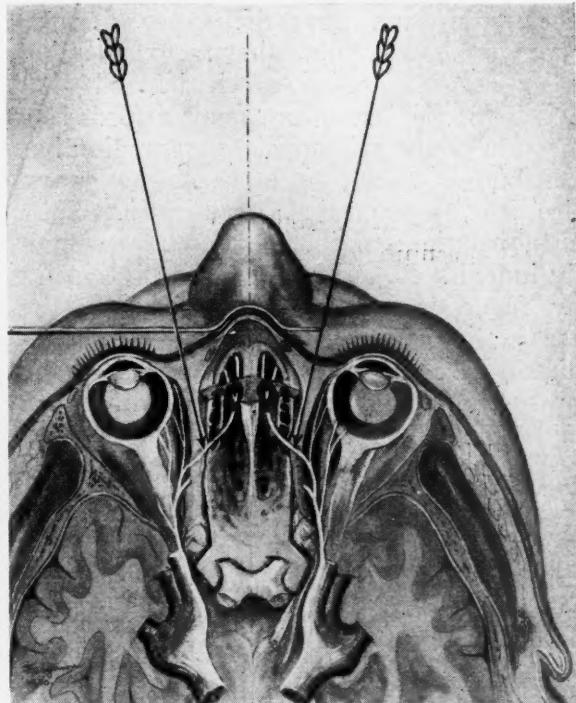


Fig. 2. Horizontal section, showing anterior ethmoidal nerve.

"In the experiments for the infraorbital nerve the injection was made after dissecting down to the nerve in one instance; in the others the injection was made through the skin. It was found that where the needle had pierced the nerve sheath the solution infiltrated for a distance of about one-half inch."*

It should be borne in mind that the difficulties of injecting such superficial nerves as the supraorbital and infraorbital in an anesthetized animal are much less than in injecting the anterior ethmoidal through the orbit in a conscious human patient. In the case of nonmedullated nerves there may be slightly more latitude for the placement of the injection, but it would appear that where a medullated nerve is to be injected with alcohol the needle must either penetrate the nerve sheath or else the placement must be accurate indeed. The necessity for accurate placement is further increased by the fact that in the orbit a minimal quantity of alcohol is to be used—in the practice of the author, $\frac{1}{4}$ c.c.—so as to confine the area of

*Sluder, G.: *Nasal Neurology, Headaches and Eye Disorders*, C. V. Mosby Co., St. Louis, 1927, pp. 137-138.

effective alcohol penetration to a very small radius. Notwithstanding these difficulties, however, by careful measurements and by the development of a sensitive touch it has proven possible to inject the anterior ethmoidal nerve with a fair degree of uniformity.

Although imperfect placement of the injection may perhaps make the relief of shorter duration than the expected year, there would seem to be other factors tending to extend the relief much beyond that period. Relief from hay fever afforded by injection of the sphenopalatine ganglion has been known to last as long as four years. Also, it is observed that cocainization of the sphenopalatine ganglion may relieve a malady indefinitely, as is sometimes the case in hay fever or asthma, and frequently the case in lumbago. Since in these sphenopalatine cases the relief lasts far beyond the known functional effect of the procedure employed, it does not seem unwarranted to predict that in many cases the relief afforded by the anterior ethmoidal injection will continue longer than a year, and in a few cases even indefinitely.

CONCLUSION

As compared with immunization methods the injection of the anterior ethmoid nerves for hay fever appears to have the following advantages: that it is as applicable after the onset as before, that it eliminates the allergic tests for the offending pollen, that it involves little loss of time for the patient and much conservation of energy for the physician, that it eliminates the unhappy reactions occasionally encountered in desensitization, that it yields a larger percentage of positive results, and finally that it is applicable to seasonal and nonseasonal types alike. The foregoing considerations would seem to make injection of the anterior ethmoidal nerves the procedure of choice in the treatment of hay fever. It is perhaps the only procedure applicable with marked success to those cases of hay fever in which desensitization fails, while well nigh the only procedure applicable with any considerable success to the other afflictions mentioned under such terms as *vasomotor rhinitis*, *hyperesthetic rhinitis*, and *nasal hydrorrhoea*.

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PROBLEMS OF INDUSTRIAL MEDICINE

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The practice of industrial medicine and surgery probably affects a greater number of physicians in Michigan than does any other branch or specialty of the profession. Many confine their practice solely to this field. Others have one or more industrial activities for whom they render service, while practically all the major specialties, except gynecology and obstetrics, are in various ways and at different times brought into professional relation with the administration of the Workmen's Compensation Act.

Until recently, none of the medical schools gave any attention to special instruction in industrial medicine and surgery and even now one wishing to enhance his skill in this specialty must travel to various centers and learn by observation mainly in hospitals of large centers of industry and without any logical plan for development.

Our Workmen's Compensation Act became operative in 1912. In the nearly 18 years of its existence, little has been accomplished by the medical profession in organ-

izing the many doctors engaged in this work or in standardizing even the most basic principles of practice. What has been done appears to have been forced upon us by employers, insurance companies or learned in the stern school of experience.

Is it any wonder then that we find ourselves confronted with many problems and practices not to our liking? It really reflects much credit upon the profession as a whole that we are not worse beset than we are and indicates that there are, here and there, strong men of great vision who have, by their example, helped keep this branch of

†Dr. Gorsline graduated in the medical department of the University of Michigan in 1901. He received his A.B. Degree from the University in 1902. He has practiced in Battle Creek, Mich., ever since. He is past-president of the Calhoun Medical Society. He also belongs to the American X-ray Society, the Radiological Society of North America and is now President of the Michigan Association of Industrial Physicians and Surgeons before which Society this paper was read as President's address. His specialty is X-ray and Industrial surgery.

the healing art on a relatively high plane.

What might have been done by adequate organization can only be surmised; and contemplation of the past is of value only insofar as it may direct our course in the future. The provisions of the Workmen's Compensation Act in Michigan are in principle and to some extent in practice much the same as in the majority of other states so far as they affect the doctor, but I believe there is room for improvement.

For instance, I believe the membership of our Compensation Board should include a suitable number, possibly one or three, physicians, men of adequate basic training and wide practical experience, who by their counsel could bring to this board the much needed expert wisdom which it now lacks for the proper determination of such points of evidence as are, of their very nature, matters for the specially trained and experienced physician. This plan appears to work well in those states where it is in operation, namely, Ohio and elsewhere.

Again, I believe the deputy commissioners presiding at the regional hearings should be made familiar with and required to pass an examination in some of the elementary rules of evidence and procedure to the end that legal horse play and other objectionable practices would be eliminated and simple justice more often obtain, with less expenditure of time and money.

Again, I am, I think, reliably advised that as a matter of law we are, as individual physicians, violating the statutes relative to the confidential relations of patient and physician every time we send in any report, whether primary or final, regarding any case which involves a diagnosis or other statement relative to that patient's condition without his consent in writing, and might on occasion be made the subject of successful legal action for monetary damages. This regardless of the fact that the rigid observance of this technicality would defeat the intent of the Compensation Act, yet no provision has been made in the law for our exception or protection. It may be well for us to also bear in mind that, even under oath on the witness stand, we should be guarded as to our testimony because, if testifying for the employer or his insurance company, certain facts regarding the case can not, without laying ourselves liable, be brought out regarding the patient unless his legal representative has opened the subject by intro-

ducing testimony which opens the matter in the proper legal way.

These technicalities are usually understood by the lawyers on both sides but in their natural zeal to win and to introduce testimony to that end, the attorney who should protect you may carelessly lead you into making statements for which you may be held liable.

It is my hope that in the very near future we may secure the advice of some competent lawyer who would, in the form of an address before our society, tell us of our rights and limitations relative to the giving of testimony and filling out of blanks.

The matter of a uniform fee bill has received more or less comment. In Ohio, such a uniform schedule is in operation. It was prepared by the Ohio State Medical Society, accepted by their board and appears to be giving satisfaction.

It would appear to be desirable that a uniform set of blanks or forms be adopted for the doctor's use in reporting industrial injuries, both as to the preliminary report and subsequent records and reports.

The present situation is a great nuisance, as each insurance company has its own special blank and much confusion results, especially when there is a change of insurance companies without due notification being given us.

Other very important changes and corrections of practice doubtless suggest themselves to you and should be brought out by discussion.

Now I come to another class of conditions which need correction. They concern the relation between the doctor and the employer and center mainly about first aid practices.

Some employers coöperate fully in carrying out a safe and adequate first aid system, but, as you know, many of these so far overstep their legitimate boundaries that they are actually practicing medicine and surgery just as far as they dare. These present a very vexatious problem and are the source of much irritation and conflict. I believe I am safe in saying that no single factor gives rise to so much discord in the course of our work as the situations we are called upon to meet as the result of certain over-officious practices in first aid. Right here we are now reaping the results of our neglect of organization, which should long ago have forestalled this situation by taking

a constructive interest in educating the employer. He should have been shown that it is a risky and expensive thing to place the responsibility of first aid work in the unsupervised hands of even a trained nurse, not to mention the folly of trusting to anyone of lesser preparation.

In my opinion, the matter of giving medical nonsurgical advice and treatment to anyone by first aid personnel other than regular, licensed physicians is a vicious practice and should be stopped.

We also find incompetents making physical examinations of applicants for employment and their findings made the basis for acceptance or rejection. I recently had a hernia case where a so-called first aid man had examined and passed the man as sound. In a few days the employe appeared with an obvious hernia and was operated at the insurance company's expense. At operation an old hernia was diagnosed, which certainly was present before his employment. Occasionally we are able to present to our clients such concrete evidence as an object lesson and do some constructive advising.

I am well aware that many of the bad practices to which I refer are not encountered in the case of full-time surgeons working under contract with the large industrial concerns, but it is the average man with his average problems that we wish to benefit.

Doubtless in conference, we would enumerate many other things which should be different, but I have mentioned these few to emphasize some of the weaknesses of our position and to call forth from the membership of this society suggestions and plans for their solution.

With our by-laws revised, we should be

able to have appointed standing and special committees whose personnel would represent the strength and wise experience of our Society. For instance, a legislative committee which could work with or through a similar committee of the State Society might exert a great influence in securing corrective legislation. Also a committee made up of aggressive but tactful men should be able to establish a contact with our industrial commission, receiving and giving advice and together working out tentative plans for betterment of the service. I am wondering if much that we would like to see changed could not be accomplished through contact with the commission without asking for too much special legislation. Also in the State Department of Health we have a powerful and most sympathetic ally. I am sure Dr. Kiefer has the widest knowledge of many of our problems of any man in Michigan and he is always ready to help. As ex-president of this society, he surely is capable of giving us wise counsel.

As your President, I wish to thank the Michigan Society of Industrial Physicians and Surgeons for having given me a most able and efficient Board of Directors. If our actions have not always been in accord with all of your wishes and if it appears that we may have taken some liberties with the by-laws, please consider that whatever has been done, was done for what we believed was the best interest of the Society and hope results have proved the wisdom of our acts. So far as possible, I hope the new administration will see fit to continue present committees because experience has taught them much that others must learn before their efforts will reach maximum efficiency.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Commissioner
LANSING, MICHIGAN

PROGRESS REPORT

A Study of Births Survived by the Mothers

The new state-wide study of births survived by the mothers is progressing rapidly and is bringing to light some interesting facts. Up to June 1, 1930, a total of 415 cases had been studied and the results tabulated. Sixty-four per cent of these mothers who survived childbirth had prenatal care, whereas in the maternal mortality study re-

cently completed, of 1,627 deaths only 40 per cent had prenatal care and in the majority of the latter cases the care received was inadequate.

As to hospitalization, 24 per cent of the mothers who survived childbirth had hospital deliveries over 90 per cent of which were planned, the balance being emergency hospital deliveries. In the maternal mortality study only 18 per cent had hospital

care entirely, the majority having been cared for at home until the situation became serious and they were removed to hospitals, where they died.

It is of interest to note that good cooperation by the patient was reported in 46 per cent of the cases which survived. Also among the survivors serious complications were reported in 13 per cent of the cases but good prenatal care saved the lives of the mothers. Five per cent of the survivors had intercurrent diseases, not directly related to the pregnancy, and here again good prenatal care saved lives.

The type of deliveries in the two groups is compared as follows: among the survivors 8 per cent were operative deliveries while in the maternal mortality study 48 per cent were operative deliveries.

INDUSTRIAL HYGIENE

An item of considerable economic importance to industries is the problem of safely re-establishing in their service the employees who have been seriously ill or severely injured. A survey of the health work conducted by industries today discloses the fact that quite generally they are beginning to recognize the need of more definite efforts toward this end.

With but few exceptions, the industries with well organized health service are giving more attention to methods that will enable employees to return to work earlier than formerly after illness or injury, but at the same time have their health more carefully safeguarded. For this purpose, industrial physicians are now inclined or are urged by the employers to make a more careful check-up on the physical condition of such employees on their return to work. Some firms require a careful examination as to the condition of certain organs at least, if there has been an absence of three days or more on account of illness. Conditions thus discovered sometimes show the necessity or advantage of the employee being given a different kind of work when he first returns. If advisable this change of work becomes permanent. Such precautions are often of great physical importance to the employee, and of economic value to the employer and to the community. Thus, the discovery of certain diseases in their incipiency may have some significance in relation to public health.

The problem of rehabilitation of the in-

jured employees is demanding more careful attention. For the permanently injured who may be disqualified for their former positions, a few large industrial corporations conduct special rehabilitation or training departments, aiming to keep in their employ, by change of position if necessary, the workers who through years of service have proven their loyalty and general capabilities, and thereby lessening to a great degree the high cost of labor turnover. Few firms are able successfully to carry on such a system of training, but the government has made provision for the care of all such cases.

The Rehabilitation Division of the Department of Public Instruction is conducting vocational rehabilitation schools and is doing splendid work in fitting injured workers to maintain efficiency in some kind of occupation and continue to be self-supporting and independent. Sometimes they are thus enabled to earn larger salaries than in their former occupations.

As the industries and the physicians interested in industrial medical and surgical service realize the assistance that the Department of Public Instruction is prepared to give their injured employees, a closer cooperative working relationship can easily be established. Physicians so concerned for injured industrial employees, wishing to learn more of the purposes and methods of the rehabilitation bureau and the part they can contribute to the government's program, should communicate with the Department of Public Instruction at Lansing, through Mr. John J. Lee, State Supervisor of Vocational Rehabilitation.

F. A. P

LABORATORY NOTES

The Michigan Department of Health was represented at the American Medical Association scientific exhibit in Detroit, June 23-27, by Dr. N. W. Larkum, immunologist, who exhibited apparatus regularly used in the laboratory to demonstrate bacteriophage action *in vitro* (liquid and solid mediums); also charts showing methods of preparation and standardization. Charts showing bacteria susceptible to lysis and agglutin production following inoculations of lysed typhoid bacilli were also displayed.

Dr. Larkum has only recently returned from Baltimore, where he was studying tissue cultures with Drs. Warren and Mar-

garet Lewis. He returned by way of Saranac Lake, where he gave a talk on bacteriophage before the Trudeau school.

Four fellows of the Rockefeller Foundation have been assigned to the Bureau of Laboratories, Michigan Department of Health, for the summer to study laboratory methods. They are as follows:

Dr. Luang Siribaed Bisuddhi, in charge of the bacteriological laboratory, Department of Public Health, Bangkok, Siam.

Dr. Yung-Tsung Yao, Technical Expert and Acting Chief of First Division, Department of Health and Sanitation, Ministry of Health, China.

Miss Dora E. Snyder, Assistant Bacteriologist, Missouri State Board of Health Laboratories.

Dr. Luigi Gabbano, Assistant in the Institute of Hygiene, Royal University of Genoa, Italy.

Dr. N. W. Larkum, Bureau of Laboratories, was placed on the staff of the Sparrow Hospital, Lansing, as bacteriologist, about May 15, 1930.

CHILD HYGIENE NOTES

Dr. Ida Alexander has just completed a study of 122 births survived by mothers in the Upper Peninsula which is part of the state-wide survey.

Miss Julia Clock is completing a breast feeding survey in Luce county and will go from there to Ontonagon county.

Miss Bertha Cooper is completing Child Care classes in Tuscola county, having had 439 enrolled in her classes. From there she will go to Presque Isle county, where she will conduct a breast feeding survey.

Miss Martha Giltner, who is doing prenatal nursing in Alpena county, has now

under her observation 151 prospective mothers. This work is being done under the supervision of the local doctors.

Miss Esther Nash and Miss Charlotte Ludington are completing a diphtheria immunization program in St. Clair county, sponsored by the County Medical Society with the immunization done by local physicians.

ENGINEERING NEWS NOTES

On June 23 our resort inspectors will again swing into action. It is planned to cover the entire state, visiting Amusement Parks, Clubs, Community Camps, Girl Scout Camps, Camp Fire Girls Camps, Boy Scout Camps, Welfare Camps, Hotels, Profit Camps, Tourist Camps, Y. M. C. A. Camps, Y. W. C. A. Camps and State Parks.

Five men are charged with the inspection of water supplies, sewage disposal, garbage disposal, camp sites, food handling, and bathing facilities, while two men under the direction of the Department of Agriculture are charged with the inspection of resort milk supplies. In 1929 the inspection of milk supplies was handled by the regular resort inspectors and did not prove satisfactory. The present plan keeps the work under the supervision of the department authorized by law to do this work. These milk inspectors are technically trained and have had much experience in this type of work so that the resort milk supply problem should be well handled.

The ratings for camps and resorts will be on the same basis as last year. These ratings will be mailed out about two weeks after the inspections, thus giving the resorts the immediate results of our work. We have received a large response from our 1929 ratings. From this and other sources we are expecting to find a decided improvement in camp and resort sanitation during our 1930 inspections.

PAST PRESIDENTS' DINNER TO THE OFFICERS, TRUSTEES
AND DELEGATES OF THE AMERICAN MEDICAL
ASSOCIATION

given by

THE MICHIGAN STATE MEDICAL SOCIETY

June 23, 1930

Detroit Yacht Club, Detroit

The Michigan State Medical Society, through its Officers and Council, complimented the Officers, Trustees and Delegates of the American Medical Association with a Past Presidents' Dinner at the Detroit Yacht Club during the Eighty-First Annual Session in Detroit, on June 23, 1930.

Dr. J. D. Brook (President, Michigan State Medical Society): Fellows of the American Medical Association: One year ago at Portland, we, as delegates from Michigan, asked you to come to Detroit. We think that you voted wisely in doing so.

At that time we told you about dynamic Detroit, about its industries, its wonderful boulevards, its parks, and its only Belle Isle in the country. We told you that we would provide you with proper accommodations, that we could house the entire meeting under one roof at the Masonic Temple, including the sections, the scientific exhibit, the commercial exhibits, and all. We told you that Windsor was but five minutes across the river by ferry or the Ambassador Bridge. We would bring Windsor to Detroit, but that being impossible, we did the next best thing and brought you to Detroit.

A considerable number of distinguished members of the American Medical Association have at some time or other come in contact with Michigan. Some of them were born here, some of them received their medical education here and returned to their respective homes to practice their profession; others came here to receive their medical education and remained here to practice.

Among this latter group is a man who in 1880 began the practice of his profession in Detroit. You will notice that in doing so, he celebrates this year the fiftieth anniversary of his practice in this city. Not only is that a great achievement, but greater still is the fact that he has maintained during all this time the very highest standards of medical conduct. Gentle, quiet, unassuming, yet courageous and forceful if necessary, he has endeared himself to the entire profession of Detroit, not only, but the entire state of Michigan, so much so that he is known

throughout the state at the present time as the dean of internists in Michigan.

I therefore have very great pleasure and honor to present to you as our Toastmaster this evening, this kindly gentleman, Dr. Charles Goodwin Jennings, of Detroit. (Applause)

Dr. Charles G. Jennings: I thank you Mr. President and Fellows of the American Medical Association, for your kindly greeting. It is always delightful to hear these flattering things said, even if we are not quite certain that they all may be true.

It is a great pleasure for me to acknowledge that I have been practicing fifty years. That is a long time. It makes me almost as old as Dr. Billings and some of these other gentlemen, but my field of labor has been delightful, Michigan has been very kind to me, and Detroit kinder.

Since the American Medical Association became a delegate body, I have had an ambition that never has been realized. Once I almost saw through the bars that have kept me from it. I feel tonight just about like Will Rogers—so this is the House of Delegates of the American Medical Association. I almost was introduced to them once. Having this ambition, and being in Washington two or three years ago at the Washington meeting, our dear friend Gerry Morgan thought that I should be a member of the House of Delegates. I told him that I never, never could be elected as a delegate. Every time I came up, Hornbogen or Moll or Brook or Angus McLean or some fellow beat me out, so I never have had this ambition filled. At Washington I thought I would go into the House of Delegates and see what it was like, see if I really wanted to become a member of the House of Delegates. I got in and was just looking the company over, thinking that I was perhaps somewhere that I shouldn't be, when, with a rap, Speaker Warnshuis said: "The House of Delegates will go into executive session," and I was fired.

That was my only experience, except this very charming one, with the House of Dele-

gates of the American Medical Association.

We have a delightful task tonight, one that will bring back many memories, and one that will enable the Delegates and Fellows once again in a remarkable group to see their various presiding officers. I think this is the first time in the history of the organization that an entertainment of this character has been given that has brought together all, or nearly all, of the Past Presidents of the Association. So this is an occasion of unusual character.

I am going to take advantage of my prerogative as Chairman for the moment to submit a question to you, without motion and without a second. I would ask you to vote upon a motion to ask Dr. Warnshuis to send a telegram to Dr. William Williams Keen, the dean of the Past Presidents of the American Medical Association. (Applause)

Dr. Keen, unfortunately, has reached a time of life that only Past Presidents of the American Medical Association seem to have reached from that very fact—a serenity of mind that permits a great longevity. Dr. Keen is ill, and I would ask you to vote "aye" to this resolution. All who are in favor of it signify by saying the usual sign. The motion is unanimously carried.

Dr. Warnshuis, will you carry out the wishes of the meeting.

Next—not in chronological order—we have a telegram from one of our older Past Presidents.

"Dr. Warnshuis: Greatly regret that engagements prevent acceptance of kind invitation to dinner June 23, and that I shall be unable to attend meeting of A. M. A. in Detroit. Am keenly disappointed to miss such an important and interesting occasion. Best regards and best wishes to yourself and my colleagues. William H. Welch." (Applause)

Dr. Warnshuis has advised me (I would not have the temerity to do it myself) that the wonderful experiences of the Past Presidents of the American Medical Association and their length would be such that it would not be wise to have them make half-hour speeches, and so I had nothing to do with it, don't lay it on me. He says that these little remarks will be limited to three minutes. The Chairman will hold you down—possibly, not that we can hold Billings down, or some of these other talkers. We don't want to hold Haggard down, for example. But we will have to begin.

The first of these distinguished men whom we have honored in the past it is difficult to introduce, as it is all of these illustrious men, to a body who knows every one of them, but I am not introducing them; I am presenting them.

FRANK BILLINGS, M.D.

In 1903, the Association elected one of the most distinguished of the citizens of the United States. From the time that he became a member of the American Medical Association he has been the wheel-horse. To use an automobile expression, he has been the gas tank and the oiling system and the chassis and the wheels, in other words the whole works.

I don't know what he thinks is the greatest achievement of his life, but I do know that medical men and the medical men of the future will look upon his clear-cut clinical demonstration of the influence of focal infection upon chronic disease as one of the outstanding demonstrations of the generation, and I feel, from my own experience, free to predict that this demonstration will, when the time comes to tell us of the etiology of the degenerative diseases, particularly the cardiovascular system, stand out as one of the prime factors in this devastating pathological condition.

I take pleasure in presenting to you the most distinguished ex-President of the American Medical Association, Dr. Frank Billings, of Chicago. (Applause)

Dr. Frank Billings: Mr. Chairman, Fellow-Members of the Association: From what the Chairman has said I ought to be so emotional that I can't talk, but it hasn't had any effect of that kind on me. When Dr. Warnshuis wrote to me and said I was expected to speak tonight, he was kind enough to say each speaker would be limited to ten minutes, not three. Am I right?

Dr. Jennings: There was a revision of that, Dr. Billings.

Dr. Billings: And that I was to speak upon that fact or thing which most influenced my life. Well, that is a good subject and an easy one, for of course it means that thing that most influenced my professional life.

In 1878, Dr. Christian Pfenger, a Dane, came to Chicago from Egypt. It was my good fortune to fall under his influence not long after he came, and I was his interne in the County Hospital for nearly two years. During that period of time, Christian Pfen-

ger awakened in me (and a good many other men, too) a quality of curiosity, of dissatisfaction with what I knew, and a desire to get more. I was poor as a church mouse, I couldn't go abroad because of financial defects, but I made up my mind I was going to do it anyway. When I went abroad in 1885, borrowing, not stealing, getting enough money to send me over, he said: "I want you to study morbid anatomy while you are there. I want you to study the patient at the bedside." And so for over a year in Vienna I was under the influence of Professors Sayman, Pountoff, and Kolisko in the pathological institute, every day, Sunday included, until they said, "You know morbid anatomy." Every day, during the day, I was working in Maumbrecker's clinic with that splendid man von Orden, and then following the dead to the deadhouse.

Pfenger imbued me with that, and if I have ever done anything in this medical world, it was through Christian Pfenger, who taught me never to be satisfied with any present day's work, and who sent me over to Vienna where I learned enough of morbid anatomy and of clinical bedside work to make a foundation for what I have attempted to do since.

I am sorry that the present tendency of modern medicine has forgotten how to examine patients physically. It is a mechanistic age. Talk about the cost of medical care. If every man who comes in contact with patients (I mean every practitioner) was resourceful, qualified, he would make a diagnosis with the things that heaven has given him, without any instrumental aid beyond the simple things that every man can control, in 85 per cent of all the cases. (Applause)

I am not going to say any more or take up any more time. Dr. Warnshuis asked me what thing had influenced my life. If it hadn't been for Christian Pfenger, I probably would have been satisfied to sit down, because I didn't have any money, and be much more mediocre than I am. (Applause)

Dr. Jennings: In 1906, the Association elected as its President a comparatively young man, but a young man who had presented to the profession the evidence of such remarkable surgical work that the American Medical Association could not help but recognize this man as one of the outstanding and the most promising of the members of the American Medical Association.

Modern medicine and the practice of modern medicine since his advent to it has been changed, and we can very frankly say that to this gentleman is due to a large degree the remarkable advances that have been made in coöperative medicine and surgery.

WILLIAM J. MAYO

I therefore have the pleasure to present to you the most distinguished Past President of the American Medical Association, Dr. William J. Mayo, of Rochester. (Applause)

Dr. William J. Mayo: Mr. Toastmaster, Members of the American Medical Association: I have many reasons to love Michigan. It is in Michigan that I got my education about forty years ago at the University. I learned to know something of Detroit at that time. I am grateful.

I bring you a message from the oldest member of the American Medical Association who has been its President, Dr. Keen. At the meeting of the American Surgical Association in Philadelphia some two weeks ago, I went to call upon him, found him confined to his chair, but so enthusiastic about the honor that was to be conferred upon the Past Presidents of the American Medical Association that he asked me to bring to the Association his love, and to tell you that it was the greatest event of his life when he was made President of this Association—and also I might say of mine. He said to tell you that he had grandsons coming up in medicine, and he hoped that the line of the Keens would continue in medicine as long as there was organized medicine. Therefore I was glad to hear this resolution brought up that we would send to him our love and regret that he was not able to attend.

Now I think of my three minutes, and at least two are gone.

What was the thing that made the greatest impression upon me? When I was a boy about ten years old, and Charlie is four years younger than I, my father, a country pioneer physician and surgeon, went on to New York, and came back after some three months. We met him at the station, and as we went home, he stopped at the office, which had been closed up during his absence. He brought home with him a little microscope about 10 or 12 inches high. After distributing a few presents, he said to my mother: "I saw in New York a microscope

made in Germany, and I would like so much if I could have one like that. But I have spent all the money." He was one of those that kept no books to speak of, so there was always that chronic shortage of money. He got out this prospectus and showed it to my mother. I stood there on one side of him, and my brother on the other, and he told about the wonders that could be seen with this microscope, but that he would have to put a mortgage on the house for \$600 to get it. You can imagine what an impression that made upon my brother and myself —that mortgage. It was right where the clinic now stands. My mother looked at the little family and finally she said: "It is our duty to do the best we can for the people, and we will put the mortgage on." It was ten years before all of that mortgage came off.

We understood then that what could be seen would be the truth, that we could see things in that little microscope and then compare them with that better one, which is one of the prized things in our clinic today. It was a Zeiss, made at Jena, a good microscope yet. We could see that there was an opportunity to investigate. It brought out the idea that the mind, the intelligence of man, is a visual brain, that what you hear is largely gossip, what you smell isn't always pleasant, and what you taste may be perverted. But after all, you can get certain things that you can reach with your hands, but the progress of medicine has been visual because our brain is visual. (Applause)

Dr. Jennings: Younger in years, but from my observation a little bit the senior in some of the things that probably he would not wish to tell us, the close associate of his distinguished brother, carrying on in the same line and with the same degree of excellence, the junior member of the great organization in Minnesota has brought knowledge and wisdom to the medical profession of the world. I therefore have the honor to present to you the most distinguished ex-President of the American Medical Association, Dr. Charles H. Mayo. (Applause)

CHARLES MAYO

Dr. Charles H. Mayo: Mr. Toastmaster and Friends: I too am very much pleased to be here and to see the other Presidents. They are all looking exceedingly well, they all have good appetites, as I witnessed tonight.

It was a nice thing to mention to us what we were to talk about, especially the number of minutes.

In the old days elections were marvelous things. They have just got through passing the tariff bill, but that wasn't in it when I was made a President by the old method. I remember it very well. There was more excitement because it was all crowded into a few days, but the results were very fine and I appreciate it very much.

What influenced my life most I would say was travel, travel that takes a man out where he can meet people and see their activities, see the work of the great men of the world, hear them speak, see them in action. There is nothing that fills one's mind with the new problems and stimulates activity in putting them into use as does travel. (Applause)

Dr. Jennings: We have been presenting the great West. Now I have the pleasure of presenting the great East, and the past President whom I will present, besides being a great physician, is something else. We have had one physician—Dr. Billings is a physician, but it isn't very often we have had a physician. Physicians don't seem to go, some way or other. It is the surgeons that have the court. But we have a physician to present at this time, distinguished in his department of medicine. You all know this, but perhaps you do not know that he has other qualities that mark him as a distinguished man. He is a naturalist of high order. He shoots and he fishes; he hunts and he does all of those things that become a real he-man. As a naturalist he has contributed one of the most important observations in animal life that we know of. He discovered the doiley bear, described him, illustrated him, and passed him down to natural history.

ALEXANDER LAMBERT

I have the pleasure of presenting the most distinguished ex-President of the American Medical Association, Dr. Alexander Lambert, of New York. (Applause)

Dr. Alexander Lambert: Mr. Chairman and Gentlemen: I do not like to criticize my distinguished Toastmaster, but he has slipped a cog and put me out of order. Following the line that my predecessors have taken, I shall tell the one thing that had most influence in the deciding of my medical career.

It is, of course, a great pleasure to receive

a medal as beautiful as this one about to be given us simply for staying alive long enough to acquire it.

The fact that I became a physician I think is probably due to Mendel's law, which I had no control over. My grandfather has had eight Lambert descendants, and five of them have been physicians, I one among them. When I graduated at Yale from the academic department, my father told me at that time, forty-five years ago, that by the time I was in active practice, chemistry would be one of the most influential things in medicine in its development and in its effect upon the discoveries of the human body. He said, therefore, that I had to go through the scientific school in a special course of chemistry under Professor Chittenden. I did so. I met a man there who was an inspiration and had been an inspiration to all his students, and whose inspiration that he gave me has lasted through my life and created a desire for scientific study and a desire for and pleasure in scientific work.

I went, as my father wished me to do, through Bellevue, as he and my brother Sam had done before me. Then I went abroad. When I came back I started to practice. I went up to see Professor Chittenden, and he offered to me the position as his first assistant in physiologic chemistry in the Sheffield Scientific School. It was one of the greatest honors that I have ever had offered me, and I had to make that decision myself. I refused it, because I said: "I am not of the type of college person who should live his life in that way. I belong in the world and I am of the world." I decided then and there that I would go out into the work of active practice of medicine and of bedside teaching, and that decision that I made I think influenced me more than anything else. It would have meant that I would have given my life to physiologic chemistry full time and would entirely have modified my existence.

That fulfills the desire that Dr. Warnshuis expressed, that I tell the strongest influence of my life, which was that of my father, kindly, just, but a very positive man, one of the few men that I have ever seen live who lived and died without an enemy, and to have been a companion of that man, to have absorbed his medical wisdom, has had a greater influence on my life, I think than any other one fact. (Applause)

Dr. Jennings: The Chairman in his hurry to get East got his wires crossed on his chronological order, and another product of the great West should have preceded the East. It is unnecessary to introduce to such an audience a gentleman who has filled such a place in American medicine. As Chairman of the Council on Medical Education for many years, he brought the standards of American medical education to a point at which it is not surpassed by that of any other country. He is equally distinguished as a great surgeon, and I have pleasure in presenting the most distinguished Past President of the American Medical Association, Dr. Arthur Dean Bevan, of Chicago. (Applause)

ARTHUR DEAN BEVAN

Dr. Arthur Dean Bevan: Mr. Toastmaster and Fellows of the American Medical Association: I have been a member of the American Medical Association for thirty-two years, I think. I have always been very proud of my membership. I have been proud of the accomplishments of the Association. I came into the Association shortly before its reorganization, and in 1902 at the Saratoga meeting, I think it was, I was made Chairman of the old Committee on Medical Education, by Dr. John Wyeth, who was then President. There presented itself to this Committee a great opportunity, because for the first time in the history of American medicine we had a strong, democratic, representative, well organized profession and Association.

We were fortunate in having some very clearheaded men on that Committee, and they felt unanimously that the one thing to do was to make a permanent sort of committee, that the old scheme of bringing in simply a year's report on medical education was of no value, that we should make the tenure of office longer, that we needed a permanent secretary. We brought in a report to that effect. The House of Delegates approved in a general way our report, but did not find it possible to furnish us with the necessary money which we thought we had to have to make the work function.

Fortunately, the next year Dr. Billings, who was then President, reappointed the Committee, or very much the same Committee, and we brought in the conception of the formation of a Council on Medical Education.

I want to tell Dr. Warnshuis that my

being on that Council, my continuing on that Council for some twenty-eight years has been the most controlling influence in my medical life. You all know the results of that work. I do not speak of it from an individual standpoint; I speak of it to emphasize particularly the fact that we have a great, powerful organization for good, that we still have great problems before us, quite as great as the problem which seemed to us to be the greatest problem, and that was medical education, because you all know that the American Medical Association was founded for the purpose of elevating the standards of medical education.

We have done wonderful work; we are doing wonderful work, but there are many great problems which still confront us and which we must meet, and I desire to speak of one of these tonight. That problem is this: What is all the work ultimately for that we have been doing in medicine, in medical education? It is for the purpose of bringing to the people of this country the great benefits of modern scientific medicine. More and more this is becoming clearly the one great problem of organized medicine, and today the one great problem of organized medicine is to bring to every man, woman and child in the United States the great benefits of modern preventive and curative medicine.

How is this to be done? It is to be done exactly as we work on the problem of medical education. It is to be done exactly as we have worked on the problem of pharmacy and chemistry. It is to be done by the organized profession with a well thought out plan.

The first thing that should be done in this plan is to develop in the Association a Council on Medical Service. This Council on Medical Service should be developed a good deal on the lines of the present Council on Pharmacy and Chemistry. It should be under the control, probably best, of the Board of Trustees. It should be a fairly large body, probably from fifteen to twenty-one men, well representing the different sections of the country. That Council would have a large job before it, but the first thing it must do is to organize and study this great problem of medical service.

We are confronted by that problem every day. We don't want to act hurriedly; we want to organize this Council and have this Council study this problem very carefully. I think they should do as the Council on Ed-

ucation did, have yearly conferences to which will be invited men representative of the public, because this problem is one which must be done in partnership with the public, with the people of this country.

How long will it take to do this? It will be a continuing process.

What will be accomplished? An enormous amount. We should take the initiative, as the British Medical Association have recently taken the initiative in this same problem, as was pointed out by Dr. Harris in his presidential speech today. We must take the initiative. The medical profession is the one body of men who are competent to take the initiative in this movement, and it will be best for the public and best for the medical profession if we do take that initiative. I don't know any more important problem that confronts the profession today than this problem, and I hope you will all get back of it heart and soul.

I would like to say that I think the time has arrived when we should secure, as soon as possible, a Secretary of Health in the President's Cabinet. I think that the time has come when we should do everything in our power to enlarge and expand and strengthen the present Public Health Service, and I believe with such a well organized profession as we have, a well thought out plan will accomplish an enormous amount of good for the people of this country.

The possibilities of modern medicine are so great, they are so necessary, they are so indispensable to human welfare, that every individual in this country is entitled to their great benefits. (Applause)

Dr. Jennings: It is only occasionally that a member of the medical profession becomes great in other than his first chosen field. The American Medical Association elected in 1921 a President who was destined to become one of the most important individuals in the civil life of our country. As Postmaster General, as Secretary of the Interior, as Chairman of the National Committee of the Grand Old Party, he has become a nation-wide known character, and I have the great honor to present to you Dr. Hubert Work, the most distinguished ex-President of the American Medical Association. (Applause)

HUBERT WORK

Dr. Hubert Work: Mr. Toastmaster, Fellow Once-Wuzzers, meaning ex-Presidents, Fellows of the American Medical As-

sociation: When I received the letter from Dr. Warnshuis I didn't quite interpret it. I first feared he wanted me to describe the event that influenced my life the most. I knew well if I did that it would sound to you who know me best as a confession.

Dr. Billings, as usual, has set the pace and relieved me from that embarrassed state of mind in which I came, but if I should say what has influenced my medical life the most, I should unhesitatingly say the American Medical Association. For more than thirty years I have been a member of this Association, and many of you well know that during that time I was honored with almost every position within the gift of the Association, first for many years as a delegate from my own state to the House of Delegates, then for five years a member of the distinguished Judicial Council, the first Council that was formed, of which Alexander Lambert was the Chairman. Later I was elected the first Speaker of the House of Delegates and served four years. That preceded my election to the presidency of the Association.

There are a good many accidents occurring in this life. Perhaps that is a sequence of them, but I profited by it more than anything that has occurred in my life in the practice of medicine.

Some of you may know that for the last nine years I occupied a semi-detached position from the American Medical Association. Yet I will promise you that the experience I had in the House of Delegates and as its Speaker and in the offices which I held, was of more service to me in subsequent work than any other experience in my life could have been.

The crux of the practice of medicine, of course, is diagnosis, the ability to see between. Practically the crux of all important positions, as far as I have seen, in public life has been diagnosis, the ability to see between. The knowledge that a physician gathers from association with other physicians and in association with his patients would stand him in very good stead in whatsoever position he may be called to occupy.

There is nothing more I should say. My time is exhausted, but I thank you cordially for the honor, after such a long absence, of being at home again and meeting with all of you. (Applause)

Dr. Jennings: In 1922, the Association elected as its President one of the most courtly gentlemen of its body. In his clien-

tele are presidents and princes, duchesses and dowagers, and his delightful personality has charmed all of us.

GEORGE E. DE SCHWEINITZ

I present with great pleasure, Dr. George E. de Schweinitz, of Philadelphia, the most distinguished Past President of the American Medical Association. (Applause)

Dr. George E. de Schweinitz: Mr. Toastmaster, Mr. President, Fellows of the American Medical Association, Ladies and Gentlemen: It was Emerson, I think, who said when asked what had controlled the success of his extraordinary life, "Because I had a friend."

Now we have been asked to tell what has been a controlling influence in our lives, professional and otherwise, it may be, and I think I have no hesitancy in say that whatever good I may have accomplished, whatever properness of career I may have pursued, was due to the fact that I had a friend, and my friend, as I imagine Dr. Mayo's friend was, was my father.

When I went to the University of Pennsylvania, quite young, I was not yet nineteen—and they caught them young in those days and sent them out, my father went to the train with me, and after some perfectly natural advice which I shall omit, said: "I exact only one promise from you, and that is that you shall remember that you were born of respectable people." With that ringing in my ears, I went to the University of Pennsylvania and had the singular good fortune of being in receipt of my medical education during the period of time when the so-called famous faculty of the 80's were active, the elder Pepper, Stilley, Agnew, Ashurst, Goodell, Wood, Durring, Harrison Allen, Tyson, an unusual congregation of men, and I did not forget that I had been born of respectable people. I would have been most disrespectful if I had not embraced those unusual opportunities afforded then by the School of Medicine of the University of Pennsylvania.

Now, gentlemen, it is an interesting thing to observe, once before referred to tonight, that among the Presidents of this Association, a few, one, has reached very senior years, several others considerable seniority of years, still others of a somewhat younger generation, and the hope has been handed out that there is something—longevity has been mentioned—that we get by being Past Presidents. It may be so, and perhaps it

really is true that if we carry on as I think all of us are endeavoring to carry on because of the opportunities we have had, perhaps time will stop shaking her restless glass and not another golden sand let fall to mark the passing of the hours.

And so I hope it may be with you and all of us, and that all of us may so carry on, so plan our tables of organization, so endeavor to achieve, that we shall not shame the day. And I don't speak of your day or of my day, but the day of organized medicine, of which we are all a very small but none the less active, integral part, and that we can never allow to shame the day, and we never will. (Applause)

Dr. Jennings: Another Past President of the American Medical Association has attained an illustrious career in political life. Dr. Wilbur, a great educator, became in the present administration the Secretary of the Interior. Dr. Wilbur expected to be here tonight. At the last moment he sends a letter of regret to Dr. Warnshuis:

"Dear Dr. Warnshuis: Just when I thought I had everything well arranged to get away for Detroit, there has been the usual struggle and delay in Congress, so that I find myself absolutely tied up. Three different measures which are of the most urgent concern are at their most vital point right now, so that I cannot leave Washington.

"You have no idea how deeply I regret this. I have been looking forward to the pleasures of attending that dinner given to the ex-Presidents. All I can say is that duties of the Government must take precedence when one has entered the public service.

"With kindest personal wishes and deepest regrets,

"Faithfully yours,

"(Signed) Ray Lyman Wilbur."
(Applause)

While surgeons and surgical specialists seem to be the particular failing of the American Medical Association, we have an occasional medical man, an occasional medical specialist. One of them whom you have honored as your President has attained the highest rank in his chosen special department. He has been one of the outstanding administrators and counselors of the American Medical Association, and I suppose the old thing couldn't run unless this gentleman were at hand to give his advice and counsel.

WILLIAM ALLEN PUSEY

I have great pleasure in presenting to you Dr. William Allen Pusey, the most distinguished Past President of the American Medical Association. (Applause)

Dr. William Allen Pusey: Mr. Chairman, I first thank you for your introduction, which in my modesty I admit is not deserved, but the first thing I shall do after I get home will be to tell my wife that in the presence of thirty-two ex-presidents of the American Medical Association I was thus introduced.

In the first place, I am very much surprised about the turn which this thing has taken. You gave us a delightful topic for the speakers, but not for the audience, and I suppose these old fellows would have talked and talked and talked until you were in the attitude of mind of the negro they wanted to get into a lion's cage in one of their stunts in the circus. They offered him money, they offered him everything else. Finally they made the final offer and said: "Why, the lion's an old lion and he's got no teeth."

"It don't make no difference. I'd ruther be chewed up quick by a young lion than gummed to death by an old one." (Laughter)

I thought when you got to me you would be gummed to death, but these snappy boys of the past in the lyrical turn the speeches have taken, have created quite a different situation.

When I thought about the most important event that influenced my life, I thought, of course, what the rest of you did—about getting married. But I felt about that like the episode of the mule in our family at the County Fair when I was a boy. There had been a mule race for a number of years, and one year Ed Durham said to Father, "That mule Abe runs pretty good, and I would like to put him in the mule race."

Father said all right. They took Abe out of the plow where he had been plowing for a week, curried him up and gave him a day or two, and ran him in the race. He ran like a scared rabbit and won the race. So year after year this mule won the race. I still have a copy of the prospectus of the Fair: "Mule Race, first prize \$15, second prize \$5, third prize \$3. Pusey's mule barred."

This situation of not speaking of our

wives in this incident reminds me of that mule race.

Of those incidents I am willing to tell, the one that influenced me most was this. I went to college, liking mathematics and hating the literary thing. I always had the faculty of learning quickly and getting it out of the way so I would get rid of the examinations. I made up my mind I would be a civil engineer. My third year I had gotten to feeling my oats, and I went out for the scholarship in mathematics. It was worth \$100, a pretty big capital. I didn't get the scholarship in mathematics, but I got it in Greek. The next year, my senior year, I still felt that I was going to be an engineer and that my genius lay in the direction of mathematics, and I went out for the fellowship, \$500 and a room the next year, in physics. I didn't get the fellowship in physics, but I got the fellowship in history.

I made up my mind I didn't know what I was good for after that, and as my father wanted me to be a doctor and I always did what he wanted in the end, I became a doctor.

I have often thought about that. In fact, one of the great surgeons of this country, one night, drunk, was driving out a few miles from a little city where he lived, and his horse wandered off the pavement into a ditch, and this great surgeon dropped over onto the grass. He pulled himself together, felt all over, and said, "My God! if I had been killed what would the great Northwest have done?"

I do know the saying that has impressed me most, and that occurred in connection with my grandfather on the day when he was 90 years old. It happened to be Christmas day. I went to see him, and we made quite a to-do of the occasion. In the afternoon after a good dinner, he and I were sitting on the side porch, a nice balmy winter day in Kentucky. He had on his overcoat and I had on mine. I referred to a man in the community who was a notorious old shaver and a skin-flint, and I said, "John Smith is getting very deaf."

He said, "Yes. If he was deaf, dumb and blind it wouldn't make any difference."

Nothing was said then for a few minutes. Then the old man remarked, apropos of nothing: "I'll tell you, son, the man who lives for himself alone lives for a damned scurvy fellow." (Laughter and applause)

I don't say that I have lived up to that

maxim, but I give it to you as a good one. (Applause)

Dr. Jennings: The Great West, the Pacific Coast, the effete East, all have been honored. In 1925, the Association turned to the genial and lovely South for its representative. It chose one of the most distinguished of the Southern gentlemen, a man with a most cordial and delightful personality, and who has the ability to tell stories which perhaps we had better censor, but he always tells them so delightfully that we forgive him.

WILLIAM D. HAGGARD

It is my pleasure to present to you Dr. William D. Haggard, the most distinguished Past President of the American Medical Association. (Applause)

Dr. William D. Haggard: Mr. Toastmaster and Friends: It is very delightful of you to indulge us in this way. I don't suppose there could be anything in our profession more to be prized than the office that you are honoring tonight. It seems to me, though, that inasmuch as anticipation is better than realization, I wish it were possible to do it all over again, and instead of being a has-been, many of us, especially myself, would like still to have the alluring glory in the ascendancy rather than in the past. In fact, I feel tonight that I am on the wrong side.

A little boy's grandmother came to visit him. She had never been there before, and in order to impress him with her importance, she said, "Johnny, I think you ought to know that I am your grandmother on your father's side."

He said, "Granny, you won't be here more than three or four days before darned if you don't find out you're on the wrong side." (Laughter)

When I was a lad, my father taught obstetrics in Vanderbilt University, and it was my pleasure to drive with him and hold the horse when he went in to lecture. Sometimes I would creep inside, and amongst the other things, I heard him tell his class with great enthusiasm about the momentous visit of Ephraim MacDowell, the great ovariotomist, to Nashville to operate upon a Mrs. Overton near the Hermitage. He said that he had passed just beyond the campus there on the Lebanon Pike, and when he went to operate he had as an assistant no less a person than Old Hickory, General Andrew Jackson, who held the hands of his neigh-

bor, Mrs. Overton, and otherwise supported her fortitude.

He was a Kentuckian, and my father was also, and he worshipped his memory very much and made the thing live so that I too became inspired with the wonders that surgery might accomplish.

I heard him, too, say that Nashville had furnished three Presidents to the American Medical Association, Paul F. Eve, William K. Bowling, and William T. Breese. It never occurred to me that Nashville would furnish another President, my distinguished teacher and colleague, Dr. John A. Witherpoon, and that even I should be so honored.

But I must feel that my father's industry and energy and ambition and inspiration and optimism made me revere and attempt to emulate the things which he held so dear. I can only look back upon his example and great encouragement as that one inspiration which has meant everything for me.

I've had a good time, too. I'm like the little darkey. They asked him how old he was, and he said, "My mammy says I'se seven, but countin' by de 'mount o' fun I'se had, I'se most a hundred."

Of these other twelve most distinguished Past Presidents of the American Medical Association, both white and colored, speaking as I do the pure African language, I can only say what the witness said when he was presented before the jury and asked if he knew any of them. He said he didn't know what they meant.

"Don't you know any of them?"

He didn't answer.

They said, "Do you know as much as half of them?"

He said, "My God! I know more than all of them put together." (Laughter and applause)

Dr. Jennings: In 1926, the American Medical Association turned its face to the rising sun again and elected as its President a representative of one of the surgical specialties who has reached the very highest rank in his chosen profession.

WENDELL C. PHILLIPS

I have the honor to present Dr. Wendell C. Phillips, of New York, the most distinguished Past President of the American Medical Association. (Applause)

Dr. Wendell C. Phillips: Mr. Toastmaster and Friends and Fellow-Workers in the medical profession: I was almost hoping

that I would be the last one that would be called upon to speak so that I could say that when he finally pronounced the benediction I was the greatest and most distinguished ex-President of the American Medical Association and I could say, "Thank God, he has told the truth at last." (Laughter)

But I think I am more ex-presidents than any one of the whole lot that have been mentioned here tonight. You know we also have an A. M. A. Golfing Association, and I am an ex-President of that. There is an ex-President's cup for which they strive every year, and I went out there this afternoon and added another laurel to my crown and won the ex-Presidents' cup of the American Medical Association Golfing Association. (Applause)

I think it is a very delightful thing to have a series of men called upon to relate incidents in their lives that have done the thing that apparently has led to their professional success. All of us could talk for hours on many such features, but the one incident that has had the greatest effect on a man's professional life, providing he has reached any distinction whatever, must be an interesting thing for anyone to listen to, and as I have listened to these men I have been profoundly impressed, and particularly, as in some cases, have noticed how slight those incidents are so far as the mere fact of relating them goes, but what a profound effect they had on the life of the man to whom they occurred

I had something of an experience like that myself.

Like Dr. Billings, I guess it was fortunate I started out to get my medical education without any money and spent three years in a medical school in New York City. I happened to have a singing voice, and during those years I sang in a church choir in the great City of New York. I don't know how they ever put up with it, but they did.

Toward the end of those three years, the woman who played the church organ and was the director of the choir, asked me one night after the rehearsal if I would stop, she wanted to talk to me for two or three minutes. She was a woman of wonderful ability and keen insight into character. She asked me what I was going to do after I finished my medical course. Being without means, being without friends, I told her: "I see nothing for me to do but to go back home up in Northern New York and begin

the practice of medicine in one of the small towns."

She said: "Has it ever occurred to you that it would be better for you if you would start practice in New York City?" I was so amazed and flabbergasted that I went home and I just couldn't think that such a thing could occur, but in her talk she said: "I have one or two friends here in the medical profession, and it is my belief that you could well get on in the practice of medicine in New York." Those introductions and the impetus that came from the mere suggestion finally determined me to make my career whatever it should be in New York City.

By the way, I didn't marry the woman, but we remained friends, and I never fail to tell her that I think her suggestion to me was the turning point in my professional life.

Anyway, I am going to tell you that I believe that I would have made a horribly incompetent country practitioner of medicine, and I think I have relieved the rural vicinities of a great deal of ignorance in the practice of medicine by staying in New York.

That was the one turning point in my medical experience that apparently has had the greatest effect.

One thing more. Immediately upon entering the practice of medicine, I connected myself with the medical organizations, and I have always attended medical meetings and have surrounded myself during these years in my county society and my state society and finally in the American Medical Association, with associates in those organizations and have tried to do my stunt in the development of the medical life of this country.

I think those two things are the two things that have had the greatest influence upon my professional life.

I am going to close by giving you one of my theories of life, and I can best put it in the form of the Norseman's philosophy.

"Man comes into this world naked and bare,
His life is made up of sorrow and care.
His exit from this world nobody knows
where,
But if he lives well here, he will do well
there."

(Applause)

Dr. Jennings: In 1927, the Association turned again to the great West and elected a clinician, a teacher, a great surgeon, and

a leader in medicine in the Middle West. I have the honor to present Dr. Jabez North Jackson, the most distinguished ex-President of the American Medical Association. (Applause)

JABEZ NORTH JACKSON

Dr. Jabez North Jackson: I fancy that my reply to the inquiry of the evening would find echo in the hearts and experiences of a large number of my auditors tonight, namely, the inspiration of a father who was a successful and distinguished surgeon and clinician.

Under his inspiration I made up my mind to be a doctor when I was scarcely out of my swaddling clothes, and this was the decision of maturity. With him I began as a boy, still in college, attending medical society meetings, the last of which prior to his death was the meeting of 1889 at Atlantic City when he was elected First Vice President of this Association, which gave me the inspiration to carry on his work.

Through him I met many of the older and distinguished members of the medical profession. I always, therefore, have had that great reverence for these masters who have gone before, and under such inspiration have come the main things which have influenced me in my career. (Applause)

Dr. Jennings: It is difficult for those of the present to evaluate history and to give to our distinguished men their proper place, and it is impossible to say at the present time whether the present President of the American Medical Association is the most distinguished of all that have gone before him, but he is doing well, and if the character of the future is to be judged by the present, he is destined to take his rank with the great medical men of the country.

He said he had no speech, and he wouldn't speak, and I understand that he is very obstinate and we might have difficulty in getting him to speak, but I know he will. Dr. Harris, the President of the American Medical Association. (Applause)

MALCOLM L. HARRIS

Dr. M. L. Harris: Mr. Toastmaster, Members of the House of Delegates and most distinguished P. P.'s of the American Medical Association: I am very glad of one thing, and that is that as the result of my youth I haven't joined that class yet but enjoy the distinction of being in a class by myself tonight as the only President of the Association.

Being President of the Association and having been connected with it for so many years has made me change a little bit in my philosophy and change somewhat in the axioms which I formerly had in life. These two axioms are: First, that all habits are bad, therefore I have no habits; second, that the greatest pleasure in life is yielding to temptation.

Now, whether it is due to my association, to my very numerous medical friends of the American Medical Association, or somewhat to the few gray hairs which I have, I want to change that last greatest pleasure in life to the axiom that the greatest pleasure in life has been the association with the greatest group of men in this country, the American Medical Association.

They have been asked to mention the event in life which has had the greatest influence in determining their existence. I want to say that the greatest event which has contributed to my career was my birth, and I have to thank my mother for that.

I only hope that the pleasures which have been mine so long may continue and that I may wish to my successors that they may enjoy as great pleasures in their connection with the position which they are about to assume as have been mine during my short service as President. (Applause)

Dr. Jennings: As it is difficult to evaluate the present, it is even more difficult to evaluate a man's position in the future. But in electing William Gerry Morgan as President of the American Medical Association, the coming President or the President Elect, I think that what we know of Gerry, his scientific attainments, his delightful characteristics, his geniality, and all of the qualities that go to make up a delightful Southern gentleman, causes us to believe that Gerry will take his place eventually among the greatest Past Presidents of the American Medical Association.

WILLIAM GERRY MORGAN

I have great honor in presenting the President Elect of the American Medical Association, Dr. William Gerry Morgan. (Applause)

Dr. William Gerry Morgan: Mr. Chairman and greatest Past Presidents and the soon-to-be P. P., Fellows of the Association: I am reminded of Mayor Walker. Last winter a certain church in New York City was out for funds. They were to give a banquet, and they went to Mayor Walker

and asked him if he would address the audience at that banquet. He hesitated a minute, and said: "Yes, ladies, I shall be very glad to address your banquet, on one condition, that I be called upon to speak last."

They in their turn hesitated, but finally acceded. The banquet came off, and five speakers delivered themselves of what had been born in their minds or in the minds of somebody else. Then he got up to speak, and in an apparently very serious manner he said: "I should have been called upon to speak first."

Great consternation in the hearts of the arrangement committee.

"But," he said, "we can't all be first. Take, for instance, our great President. George Washington, first in war, first in peace, first in the hearts of his countrymen, and he married a widow."

My state of mind now reminds me somewhat of a conversation I had with the great Ham Lewis. He was speaking about an address that he was to give, and I said, "Senator Lewis, I would give five years of my life if I could get up and speak, unafraid, as you do."

He put his hand on my knee and said, "Good God, Doctor, unafraid! When I get onto my feet I am seized with incontinence."

In considering the introduction which our Chairman has given me, I am reminded of something that happened in the police court in Richmond, Virginia, this winter. A colored man was haled into court for stealing, and the judge, who had known this man for a long time, said to him: "Sam, I am very much surprised, very much grieved to find you here charged with stealing, and much against my judgment I am going to sentence you to ten days in the workhouse."

"Oh, Judge, don't do that, don't do that, Judge, think of my poor wife. What will she do?"

"Well, Sam, I had a note from your wife this morning, in which she asked me to give you four weeks."

So Sam started out of the room, and at the door he turned around and said, "The only thing I can say, Judge, is there's two liars in this court, 'cause I ain't had no wife." (Laughter)

In considering the great honor which you have conferred upon me, I am reminded of Lord Kelvin who was presented with a medal for something or other, at the hands

of the king, and the king made his speech and Lord Kelvin said: "Your Highness, since there is no damned question of merit in it, I'll accept it."

Dr. Warnshuis didn't ask me to state what had influenced my life most. I think he thought that there wasn't enough in it to have had any influence on it. However when I was ten years old a revival meeting came to town, a Methodist minister came to stay at our house, and the first session was on a Saturday afternoon. I went to that revival with a bag of peanuts, and the good parson told us many things. During the time, he hammered and pounded and made merry, as they did in those days. When we came home, at supper the good parson turned to me and said, "Willy, what are you going to be when you grow up?"

I replied, "I am going to be a Methodist minister."

"And why is that, Willy?"

"Because I can hammer and pound all I want to."

So far so good. The next morning, Sunday, I was taken to church to hear the par-

son deliver a sermon, and after he had prayed for nearly two hours, I knew that I was going to be a doctor. That probably influenced my life more than anything else.

I am about to enter upon the great office, the greatest in the gift of medicine in the world. I do so with a great deal of humility and with a knowledge of my unfitness. I have felt that all along. But in the presence of all these Past Presidents I know how far short I measure up to the standards which have been set by the great men who have preceded me. With my humility, however, I am filled with gratitude for the great honor which you have conferred upon me. (Applause)

Dr. J. D. Brook: Gentlemen, this concludes the program of the evening. We are very happy to have had the privilege of entertaining you, and we want to say that this dinner is but one of the expressions on the part of the State Society of our appreciation and of our hospitality. We hope that you will like coming to Detroit so well that you will soon wish to come again.

The meeting adjourned at ten forty-five o'clock.

A. M. A. PRESIDENT WARNS AGAINST STATE MEDICINE

A warning to physicians of the country not to let their profession be made to share in the paternalistic tendencies of the times by means of the development of state medicine was given by Dr. William Gerry Morgan, of Washington, D. C., president of the American Medical Association, at the first general meeting of the association held in Detroit. Neither the public nor the physician will profit by government or state control of the practice of medicine, and neither the public nor the majority of physicians will be responsible if it ever comes to pass in this country, Dr. Morgan gave as his opinion. "I do not believe 'the people' will be responsible if the time ever comes when the medical profession supinely falls into the lock-step ranks of state-controlled servants," Dr. Morgan said. "It will be the fault, rather, of 'blatant propagandists' within our own ranks, operating through unthinking sentimentalists, political tricksters and noisome newspapers."

Dr. Morgan cited conditions in Europe where state medicine, under various sick insurance schemes, is actually operating. Dissatisfaction is felt there by both doctors and patients, however.

"No scheme has yet been evolved of state insurance, state medicine, or whatever it may be called, that has demonstrated unequivocally the advisability of going the limit in the matter of governmental control over individual health maintenance," he said.

Dr. Morgan traced the history of paternalistic tendencies of governments in other fields than medicine. He praised the work of the U. S. Public

Health Service, but decried any efforts to increase its scope beyond what it is now.

The economic argument that state-controlled medicine would result in lowered costs of medical care to the public was met by showing that the present high costs are not due to any profiteering on the part of the medical profession but result from other causes. Dr. Morgan quoted from reports of the Julius Rosenwald Fund and the Committee on the Cost of Medical Care to show where most of the money paid for sickness goes.

Doctors' bills amount to less than one-quarter of the \$2,841,000,000 which is the annual sickness expenditure in this country. About \$2,000,000,000 of this comes directly out of the pockets of the people for service they have received, the rest coming from federal, state and local taxes, private philanthropies and a few other sources.

"If every penny of the two billion which the people pay were equally divided among the more than 99,000 members of this association, how rich would we be?" Dr. Morgan asked. "The answer to this question should settle at once the charge that the high cost of sickness enriches the medical profession.

"When we view the whole of this problem of sickness and the individual or family budget, we fail to read into it any logical argument in favor of government-controlled medical administration, whether this control be federal, state or municipal within the definition given by this association."

Dr. Morgan suggested that this problem could be solved without the adoption of state medicine, in a manner more in keeping with American history, traditions and temperament.—Science Service.

TRUTH ABOUT MEDICINE

NEW AND NON-OFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Non-official Remedies:

Synephrin — Hydroxyphenylmethylaminoethanol Hydrochloride.—The hydrochloride of an alkaloid obtained synthetically. Synephrin is used as a vasoconstrictor. It is less toxic than either epinephrine or ephedrine, and its vasoconstrictor action, while not so pronounced as that of epinephrine, endures for a longer time. In combination with procaine hydrochloride it is useful for local anesthesia in dental operations and in minor surgery in cases in which a bloodless area is not required. The drug is also supplied in the form of Synephrin Solution "A," Ampoules Synephrin-Procaine, 3 c.c. and Hypodermic Tablets Synephrin - Procaine. Frederick Stearns & Co., Detroit.

Mead's Dextri-Maltose with Vitamin B.—A mixture containing approximately: maltose, 52.58 per cent; dextrins, 39.80 per cent; protein, 4.34 per cent; mineral salts, 2.28 per cent; and moisture, 1.00 per cent. It is standardized physiologically to contain in each 2.5 Gm. the Vitamin B₁ and B₂ equivalent of approximately 1 Gm. of dried yeast or 2 Gm. of wheat embryo. Mead's Dextri-Maltose with Vitamin B is proposed for use in the diet of infants suffering from Vitamin B deficiency. Mead Johnson & Co., Evansville, Ind. (Jour. A. M. A., May 3, 1930, p. 1405.)

RULES OF THE COMMITTEE ON FOODS

The Committee on Foods of the Council of Pharmacy and Chemistry publishes a revised statement of the information which should be submitted to the Committee by manufacturers who wish their food products included in the book "Accepted Foods." The Committee will consider all food products for which health claims are made as coming within its purview. If the health claims made are satisfactory to the committee, in view of the composition and process of manufacture, the committee will accept the product for its book "Accepted Foods" and will grant to the product the use of the seal of the committee. If the product is found to be outside the scope of the committee in that no health claims are made for it, and if the product and the advertising are otherwise satisfactory, the product will be exempted. A list of exempted products will be published in the book "Accepted Foods," and such products will be permitted to be advertised in the publications of the American Medical Association. A list of rejected foods will be published in the book "Accepted Foods" together with the reasons for such rejections. Rejected products will not be permitted to advertise in any publication of the American Medical Association. Infant foods, whether health claims are made for them or not, are considered to be within the scope of the committee's consideration. (Jour. A. M. A., May 3, 1930, p. 1407.)

THE LAXATIVE ACTION OF BRAN

Bran has acquired an extensive vogue in this country as an adjuvant to the diet to correct the widespread tendency to constipation. One of the

features that particularly serves to recommend it in a popular way is the fact that it is not a drug. (Jour. A. M. A., May 3, 1930, p. 1410.)

FOODS

Post's Bran Flakes with other parts of Wheat (Postum Co., Inc., Battle Creek, Michigan).—The product is composed of bran flakes with other parts of wheat, flavored with malt syrup and salt. It combines the advantages of wheat bran in a nourishing and appetizing food. (Jour. A. M. A., February 15, 1930, p. 485.)

COFFEY-HUMBER METHOD FOR CANCER

The remarkable publicity accompanying the introduction of the Coffey-Humber method for the treatment of cancer passed briefly into a quiet phase, leaped upward with the eastward jaunt to the congressional hearing, again became quiescent for a few weeks, and burst forth into a Sunday supplement feature. In the meantime pathologists, surgeons and other conoscenti who have investigated the method express nothing but profound disappointment with both the clinical and the pathologic results. (Jour. A. M. A., May 3, 1930, p. 1410.)

USE OF THYROID IN OBESITY

The use of thyroid in obesity should always be controlled by a previous basal metabolism test. If this is normal or subnormal, it is safe for a physician to use thyroid. The best practice is to start with small doses of desiccated thyroid (Thyroideum, U.S.P.), gradually increasing. The small dose would be approximately 0.03 Gm. (1/2 grain) twice a day. The physician must keep a sharp lookout for fast pulse, nervousness or other symptoms resulting from thyroid stimulation. An obese person should not expect reduction by thyroid unless his diet is restricted, and when dietary restrictions are followed thyroid is not needed as frequently. (Jour. A. M. A., May 31, 1930, p. 1784.)

VITAMIN A DESTROYED BY RADIOACTIVE MATERIALS

New knowledge of the vitamins was disclosed at the Chicago meeting of the American Society of Biological Chemists. Destruction of Vitamin A by radiothorium was reported by Prof. A. G. Hogan, C. L. Shrewsbury and Gerald F. Breckenridge of the University of Missouri. This vitamin is important for promoting growth and for preventing eye disease. It is found in butter, cheese, eggs, spinach and liver. While the experiment was conducted with radiothorium, the inference is that any radioactive substance would have the same effect on this important vitamin.—Science Service.

FATAL POST-TRANSFUSION REACTIONS

In a series of 4,000 transfusions of unmodified blood reported by Osborne Allen Brines, Detroit, the mortality was 0.05 per cent. Incompatibility of blood was apparently not a factor in the production of these reactions. Cross agglutination of the blood of the donor and that of the recipient is superfluous provided the direct matching is properly done. The universal use of Group IV donors is strongly advocated as a means of preventing accidents and reducing the incidence of post-transfusion reactions. The blood group of an individual remains constant throughout life. The negligible mortality directly attributable to blood transfusion compared with the results obtained argues well for the efficacy and safety of this form of treatment.—Journal A. M. A.

THE JOURNAL

OF THE

Michigan State Medical Society

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Contributors are responsible for all statements, conclusions and methods in presenting their subjects. Their views may or may not be in agreement with those of the editor. The aim, however, is to allow authors as great latitude as the general policy of The Journal and the demands on its space may permit. The right to reduce in length or to reject any articles is reserved. Articles are accepted for publication on condition that they are contributed solely to this Journal.

All communications regarding advertising and subscriptions should be addressed to F. C. Warnshuis, M.D., 2429 University Avenue, St. Paul, Minnesota, or Suite 1508 Grand Rapids National Bank Bldg., Grand Rapids, Michigan.

AUGUST, 1930

"I hold every man a debtor to his profession, from the which as men of course do seek to receive countenance and profit, so ought they of duty to endeavor themselves, by way of amends, to be a help and ornament thereunto."

—Francis Bacon.

EDITORIAL

A MUNIFICENT GIFT

The lay press of early June announced the benefactions of Mr. Cook, a New York capitalist and graduate of the law department of the University of Michigan, to his old alma mater. Mr. Cook's gifts to the University have been munificent. Remembrances in wills to state educational institutions have not been any too generous in the past. There may have been a feeling that what is everybody's property is nobody's property; or there may have been a disposition to ignore tax supported institutions, leaving their maintenance entirely to the taxpayer. Of course the University of Michigan has been remembered by its affluent citizens, evidence of which is to be seen in

the Hill Auditorium, the Clement Historical Library and the recent gift of a considerable tract of land by Colonel Edwin S. George of Detroit.

The late Mr. Cook in his will expressed his belief in the large influence of the legal profession upon the nation. There is no doubt of the great extent of that influence and we would not wish to diminish it but to improve it, make it more effective in the restoration of what is termed "law and order." Law and justice are conceived often in the same breath. It would seem to us to be the duty of the conscientious lawyer to have as his ideal the securing of justice and not to lend his ability and erudition as some have done to what sometimes amounts to the defeat of justice.

From the very nature of law its devotees are simultaneously trained for legislative positions, which accounts for the larger proportional number of lawyers in congress and in parliament than members of any other profession. The lawyer is trained in forensics, while we belong to what is known as the "silent profession." Divorce technic from medicine, dentistry or engineering and there is very little left. The doctor, dentist or the engineer must depend upon his art, directed of course by science. But science without technical skill is to a large extent helpless. Not so law. Then may we look for better trained lawyers who will be guided by the technical findings of science in its broadest sense, who will realize that truth and justice do not depend on besting an opponent.

SWEATING

Sweating has been considered largely as a mechanism for the regulation of body temperature. Professor Yas Kuno of the Manchurian Medical College has pursued studies which indicate that sweating is a more complex phenomenon than formerly believed.

In general, the sweat glands found over the whole body surface become active when the surrounding temperature is increased. The degree of sweating, however, differs considerably on different parts of the body, due both to the relative activity of the glands and to their distribution. Methods have been devised by which sweating in equivalent areas of the body are compared. Sweating is greatest on the exposed parts of the body and on those regions where the need of heat regulation is greatest, namely,

on the head, the neck, the dorsum of the hand and on the front and back of the trunk. It is less in the gluteal and mammary regions where the skin is rich in subcutaneous fat. Contrary to popular opinion, perspiration under the armpits and between the legs is surprisingly low.

When the air temperature is raised, sweating increases over the whole body, the proportion of moisture given off varying according to the region. Even when a relatively small part of the body is exposed to increased temperature, there is a diffuse body perspiration. The palm of the hand and the sole of the foot, regions which have a relatively high moisture elimination, do not, however, show an increase in sweating with temperature increase; perspiration here does not seem to have the same physiological basis as it has elsewhere on the body.

With mental stress, however, the palms and soles perspire freely. When subjects are required to make mental calculations, the moisture elimination in these regions is markedly accelerated. Sweating is maintained until mental exertion subsides. Although the mechanism of this phenomenon is obscure, an interesting correlation is evident.

The palms and soles are specialized for grasping and for contact with foreign surfaces. Although a thick skin, papillary ridges, and a dense subcutaneous fascia increase friction forces, these forces are not maximum unless there is a small amount of moisture present. It seems possible that the sweating function in the palms and soles was specialized for the maintenance of a high efficiency of these structures as grasping organs. Although this function may appear to be of small importance to us, man's human and prehuman ancestors may have found it of real survival value. In primitive man and in the animals, mental stress is closely associated with physical effort; possibly the increased sweating upon the hands and feet of some remote ancestor under the influence of fear or excitement better enabled him to escape an enemy or to capture his food.

COST OF MEDICAL SERVICE

There has been a great deal said regarding the high cost of medical service, and, as is well known, a national committee is at work investigating the charge against the medical profession and ancillary factors in

the care of the sick. So far as the medical profession is concerned the grievance is more imaginary than real. A man will consider a fee of \$50.00 to \$75.00 exorbitant remuneration for a physician who brings him safely through a siege of pneumonia who thinks nothing of paying the same sum to a mechanic who overhauls his automobile.

But let us get down to facts: The accompanying copy of a "Fee Bill" agreed

upon by the St. Clair and Sanilac County Medical Society dated Nov. 11, 1869, shows the fees which prevailed sixty years ago. The reduction of our photostat copy renders the smaller type difficult to read without high magnification. In the practice of medicine the prevailing fees were as follows: first visit, prescription and advice, \$2 to \$5; subsequent visits, \$2 to \$3; additional prescription to patient in the same family, \$1.00; night visits \$4 to \$10; obstetrics \$10 to \$25; instrumental \$10 to \$50; all visits subsequent to accouchement the same as for regular visits, \$2 to \$3. There is a long list of itemized fees for surgical service. Major operations ranged from \$100 to \$500. The fees for reducing dislocations of the hip joint from \$50 to \$100; a shoulder.

elbow, knee and ankle from \$25 to \$50. The scale for treating fractures ranged from \$25 to \$50.

The cost of practicing medicine today is infinitely greater than sixty years ago. Such items as rents, particularly in the cities of larger population, are out of all proportion to rents of those days. The cost of medical education today or any time during the past quarter of a century is greater and the time spent in pre-medical and professional training is likewise much longer. All factors considered, the cost of medical service is today actually less so far as the doctor's part in it is concerned, than sixty years ago. A great many physicians have not advanced their fees during the period of general price inflation during and following the war, in spite of the fact that the overhead had practically doubled, particularly in such laboratory specialties for example as roentgenology and clinical laboratory work.

Appended to the "Fee Bill" is the following declaration involving the ethics of the time:

It shall be dishonorable for any member of this Association to attend families or individuals by the year, or to make any other bargain or arrangement, the tendency of which will be to avoid the full purport and effect of the foregoing list of charges.

All bills shall be considered due when services are rendered, and bills are to be presented at least twice a year, and settlement requested. It is particularly recommended to each member of the Association that all his unsettled bills be presented at the close of each year. Uniformity in this respect is considered of great importance to the interests of the profession. It shall be considered proper to make liberal deductions to all persons in moderate circumstances.

In all cases it shall be the duty of the physician or surgeon, who invites counsel, to notify the patient or his friends, at or before the consultation, that the fee, mentioning the sum, is expected at the time when the services are rendered; and in case it shall not be so paid, the attending physician shall, unless otherwise requested by the consulting physician, include the charge or charges in his own bill, or send both accounts in together, and in this case he shall account to the consulting physician for, at least, his proportion of all moneys on said accounts.

INTRAVENOUS UROGRAPHY

Urography, given its original impetus by Völcker and von Lichtenberg in 1905, after their successful pyelographic studies, has again come into the limelight by virtue of satisfactory diagnostic results following the administration of drugs intravenously. The thought that visualization of the renal pelvis and ureter might be accomplished by means of drugs excreted by the kidney has been uppermost in the minds of urologists ever since the instrumental or retrograde

method with the use of ureteral catheters was established. It is most interesting to note that von Lichtenberg has been intimately connected with the development of the more modern method.

The first valuable results achieved in the evolution of intravenous urography were published by Rowntree, Osborne, and their associates at the Mayo clinic in 1923. These workers used sodium iodide; were encouraged to find a surprising tolerance to the drug and in practically all instances obtained excellent cystograms. Because of little success with visualization of the renal pelvis and ureter, they did not advocate adoption of the method.

Roseno, in Germany, was more successful, using an urea-iodine combination called pyelognost, and reporting excellent results in 1929. This preparation, however, seems to have disadvantages, being poorly tolerated in certain types of disease with the diagnosis of which intravenous urography might be of particular value. Roseno advises against its use in the aged, debilitated, or those with heart lesions or known advanced renal insufficiency.

Uroselectan, on the other hand, is practically non-toxic; has been administered in all types of patients with sundry renal lesions and without harm. This substance, synthesized by Professor Arthur Binz of Berlin, in 1927, was used in von Lichtenberg's clinic early in 1929, and during that year enthusiastic reports were published by Swick and by von Lichtenberg, based upon practical clinical application. The excretion of iodine in the urine renders the outline of the urinary tract visible and also furnishes a potentially valuable functional test. During the present year, uroselectan has been available in certain American clinics and at the recent annual meeting of the American Urological Association in New York, a number of reports upon clinical experiences with the drug in urographic studies, were given from these clinics, following a presentation concerning the drug and the method of application by Professors Binz and von Lichtenberg, in person.

More recently, at the meeting of the American Medical Association, in Detroit, Swick and Binz again presented the subject, and in the Scientific Exhibit there were on display many of the films obtained by the method, at the Mayo Clinic; these gave graphic evidence that intravenous urography

has already proven a diagnostic measure of great value. Uroselectan is now available for general use and has been submitted to the Council on Pharmacy for approval.

Intravenous urography will not take the place of retrograde urography except in certain cases. Von Lichtenberg states that the indications for its use are three-fold:

1. Cases in which instrumental pyelography is impossible due to inability to perform cystoscopy and ureteral catheterization on account of anatomical, pathological, or technical reasons.
2. Cases with ureteral obstruction in which pyelographic solution cannot be injected beyond the obstruction.
3. Cases in which instrumental pyelography carries a risk for the patient.

The drug is excreted by the glomeruli, hence if the renal parenchyma is destroyed or temporarily inactive, satisfactory films are not obtainable, in fact no shadows are found where there is a non-functioning kidney. Again, if renal excretion is normal, the urograms are indefinite and incomplete, due to too rapid excretion and lack of sufficient concentration in the renal passages. Therefore, intravenous urography is valuable in direct proportion to the accuracy of its interpretation.

ROBERT E. CUMMING, M.D.,
Detroit, Mich.

APPRECIATION

AMERICAN MEDICAL ASSOCIATION
535 N. Dearborn St.,
Chicago, Ill.,
July 2, 1930.

Dr. F. C. Warnshuis,
Grand Rapids, Michigan.
Dear Doctor Warnshuis:

In accordance with instructions received from the Board of Trustees of the American Medical Association and from the House of Delegates, I am writing to convey to you and, through you, to the officers of the Council of the Michigan State Medical Society a very sincere expression of appreciation for the delightful hospitality extended to the officers of the American Medical Association and to the members of the House of Delegates during our annual session held in Detroit last week.

The arrangements made for the comfort and convenience of the Board of Trustees during their regular meeting could not have been excelled, and the gracious hospitality

extended to the officers of the Association and the members of the house of Delegates on Monday evening could not under any circumstances have been more delightful. The facilities provided for various meetings and exhibits were splendid; the work of the Local Committee on Arrangements was done in the kindest and most efficient manner, and the members of the Association who attended the session were the recipients of the most kindly courtesy on every hand. Many expressions of appreciation have come to me from members of the House of Delegates, from officers of the Association and from numerous individual members who were at Detroit.

I am very sure that the Detroit Session and the very gracious hospitality extended by members of the Wayne County Medical Society and by the officers and members of the Michigan State Medical Society will be long remembered.

With most cordial good wishes, I am
Very truly yours,
OLIN WEST.

BEAUMONT FOUNDATION LECTURE

"T. Wingate Todd is the author of the latest series of Beaumont Lectures, motivated by the Wayne County Medical Society of Detroit. Dr. Todd writes on Behavior Patterns of the Alimentary Tract. The divisions of the subject are three: I. Principles of Gastric Motility; II. Gastric Behavior Patterns; III. The Large Bowel. The Beaumont Series is very popular, not only because of the low price at which each number is sold (\$1.00), but because they are prepared by prominent authors and because they are addressed to matters of wide interest."—From Kalends, published by the Williams and Wilkins Company, Baltimore, who are the publishers of the Beaumont Lectures.

Comment has already been made in the Journal of the Michigan State Medical Society on this lecture foundation series. Each member of the Wayne County Medical Society receives a copy of these lectures by virtue of his membership. The attention of the members of the Michigan State Medical Society outside Wayne County is drawn to the publication. Many doctors have come into Detroit to attend the lectures, as an invitation has been extended to all State Society members. These lectures are on basic scientific aspects of medicine. The purpose is to make the application as broad as possible. Several of the back numbers of the Beaumont Foundation volumes are out of print. The highly scientific character of the series has rendered it very valuable.

A. M. A. PAST PRESIDENTS' DINNER

Our State Society entertained the Officers and House of Delegates of the A. M. A. with a Past-Presidents' Dinner, at the 1930 Detroit Session. As guests of honor, we had the living past presidents of the A. M. A. in attendance at that session. Each past president was advised in advance that he would be called upon to relate the event or incident that exercised the greatest influence on his life.

Their responses are published in this issue, just preceding the Editorial page. Surely our members will enjoy and profit by the remarks of these leaders in American medicine.

F. C. W.

SAYS CANCER THREATENS FOUNDATION OF CIVILIZATION

"Cancer has outgrown its classification among the diseases common to mankind. It threatens the very foundation of civilization," declared Dr. William H. Kraemer, of the Tumor Clinic, Jefferson Hospital, Philadelphia, at the Detroit meeting of the American Radium Society. "The realization of the seriousness of cancer is the most pressing medical problem confronting the physician at the present time," Dr. Kraemer said. The difficulty of diagnosing the disease is the weakest link in the present system of management. The public likewise is not sufficiently impressed with the need of an early discovery, in order to effect a cure of the disease. Because the average patient does not know enough about the present proved methods of cancer treatment, he lacks faith in the medical profession and as a result patients by the thousands follow fake cancer cures around the country, Dr. Kraemer said.

The entire success of cancer treatment depends on early diagnosis by the clinician. He must become so skilled that he will be able to recognize it in the early stage in his patients. Dr. Kraemer recommends that in every medical school cancer should be taught as a separate major subject and that every hospital connected with a medical school should have a tumor clinic. By this means every graduate would gain practical knowledge of the early symptoms of cancer and how to diagnose it. Dr. Kraemer reviewed the present knowledge of cancer and said that many workers are turning to the view that cancer is a general systemic disease. The fact that not a single invariable factor in the origin of cancer has been isolated strengthens the general systemic theory of its cause. For treatment, Dr. Kraemer advised surgery, X-ray and radium with lead as an adjunct in special cases, though it should never be used alone as a major treatment.

At the same meeting, Dr. W. L. Clark, of Philadelphia, described electrosurgical methods of treating cancer and allied diseases. This method should be considered an adjunct to general surgery and not as something different and separate, he said. For cancer or similar conditions in breast, chest, sinus, pelvis, abdomen and particularly for small growths on the eye, the method has been found helpful. Dr. Clark predicted that with greater improvement in instruments and technic, electrosurgery will continue



A DOCTOR'S HOBBY

This piece of statuary is the work of Dr. Charles E. Dutchess of Detroit. Dr. Dutchess devotes his major time to the practice of gynecology and obstetrics and as an avocation he indulges in sculpture. This bust of Harvey is modelled from a cake of soap. What the doctor would accomplish with deathless marble or bronze it is difficult to say, for we think that this is a very superior piece of work. While commanding Dr. Dutchess we would not overlook the work of Frank M. Ruslander, of Harper Hospital, Detroit, who photographed this little bust. An object entirely white is a difficult subject for the photographer. Mr. Ruslander is also to be congratulated on his part in the reproduction.

to grow in usefulness and will in time be found indispensable in surgical practice.

The general conception that cancer of the skin is a comparatively benign condition is not correct, Dr. Isaac Levin, of New York City, told the members of the society. This type of cancer may be fully as malignant in the skin as elsewhere. The variations in the course of the disease depend on the difference in the structure of the tissues attacked. Cancer of the lower lip is very malignant because it has a rich supply of lymph nodes. In cancer of the skin of the ear, the greater malignancy is due to the close proximity of the cartilage which easily becomes necrotic and interferes with healing.—Science Survey.

COMMUNICATIONS

DEATHS

July 10, 1930.

F. C. Warnshuis, M.D., Secretary
Michigan State Medical Society,
Grand Rapids, Michigan

Dear Doctor Warnshuis:

The Pennsylvania members of the 1930 House of Delegates of the American Medical Association in caucus assembled June 25, by unanimous vote directed the undersigned to convey to the officers and members of the Michigan State Medical Society the thanks of the delegates from Pennsylvania for the entertainment given at the Detroit Yacht Club on the afternoon and evening of June 23, 1930.

Yachting is indeed uncommonly enjoyable entertainment for Pennsylvanians, and the opportunity to pay tribute to the ten or more "most distinguished ex-presidents of the American Medical Association" who were present, was doubly appreciated.

I am sure that the 292 members of the Medical Society of the State of Pennsylvania and their accompanying ladies who enjoyed the social diversions provided by the Wayne County Medical Society will lead their fellow-members in the Medical Society of the State of Pennsylvania (8,000 members) in urging all Michigan members of the A. M. A. to come to Philadelphia in 1931.

With kind personal regards, I remain.

Sincerely yours,
WALTER F. DONALDSON, *Secretary.*

July 3, 1930.

Dr. Fred C. Warnshuis,
1508 National Bank Bldg.,
Grand Rapids, Mich.

My dear Doctor:

I cannot refrain from writing you a few lines to express my gratitude to you and your State Society for the wonderful banquet you tendered to the Officers and the House of Delegates of the A. M. A. It was beautifully put on, and I hope you and your good fellows will think that we did you credit.

With all good wishes, I am,
Very truly yours,
WENDELL C. PHILLIPS.

June 27, 1930.

Dr. F. C. Warnshuis, Secretary,
Michigan State Medical Society,
National Bank Bldg., Grand Rapids, Mich.

My dear Dr. Warnshuis:

This is to congratulate you most heartily and the officers of the Michigan State Medical Society in giving a most splendid entertainment to the officers, members of the House of Delegates and the ex-Presidents of the A. M. A. on Monday, June 23, 1930.

The dinner was excellent and the program was most interesting. Dr. Jennings, as the toastmaster, filled the place splendidly.

This sort of gathering is not only enjoyable, but will have an enormous good influence on the conduct of the fellows of the A. M. A., making them more loyal to our great medical organization.

Please accept my personal thanks and believe me, with much esteem,

Cordially yours,
FRANK BILLINGS.

DR. CARL S. OAKMAN

Dr. Carl Oakman, who had been engaged in X-ray practice in Muncie, Indiana, died on the 20th of June at the University Hospital, Ann Arbor, Michigan, from brain tumor. He was fifty-four years old. Dr. Oakman shortly after his graduation from Harvard University located in Detroit in the year 1907. After several years of practice he entered the Digestive Ferments Company where he held an official position for thirteen years, and for three years he was president and general manager of the Wilson Laboratories of Chicago. Dr. Oakman, once a member of the Boston Symphony Orchestra, was one of the most talented violinists in Detroit during his residence there. In 1924 he returned to the University of Michigan as a member of the University hospital staff, and two years later went to Muncie, where he practiced to the time of his death. He is survived by his widow, one son, and two daughters.

THYROTOXICOSIS IN ELDERLY PERSONS WITHOUT SIGNS OF GOITER

Hugo A. Freund and Warren B. Cooksey, Detroit, report five cases and call attention to the fact that primary hyperthyroidism frequently occurs in elderly persons without visible or palpable goiter. These patients more often present symptoms referable to the gastro-intestinal tract as their initial complaint. The usual signs of exophthalmic goiter are generally obscure. Compound solution of iodine promptly controls and terminates the vomiting, which in one instance had persisted for four weeks without relief. Subtotal thyroidectomy is often necessary. Prolonged preliminary treatment, however, is essential to prepare these patients for operation. Their response to treatment is striking and progressive, materially improving their chances for recovery from operation. In the two cases that came to operation, intensive preliminary treatment did not prove adequate. In three cases the continued use of iodine solution with only slight periods of interruption has succeeded in arresting the hyperthyroidism. Its prolonged administration in these cases has not produced ill effects. Its continued administration is apparently essential to maintain the patient's sense of well being.—Journal A. M. A.

SUPPURATION OF PARANASAL SINUSES AS FACTOR IN FOCAL INFECTION

In a review of the histories of 400 cases made by Carl M. Anderson, Rochester, Minn., sinusitis was not a factor in focal infection. Teeth, tonsils, the prostate gland, and other foci are of more importance. Suppurative sinusitis may be a focus of infection on rare occasions. In a patient with a nose normal on clinical examination, and with a history negative for diseases that can be referred to the nose, any exploration which involves mutilation of the nasal membranes is not justified. Unnecessary trauma reduces the resistance of the membrane and may introduce infection. Toxins are absorbed by the blood stream, but bacteria are rarely transmitted to distant parts of the body from the paranasal sinuses. Existing infection of the nose and paranasal sinuses should be treated in the most conservative manner consistent with the complete eradication of the disease.—Journal A. M. A.

Benton Harbor and St. Joseph Bid You Welcome To Our 110th Annual Meeting, September 15, 16, 17, 1930.

GREETING FROM THE BERRIEN COUNTY MEDICAL SOCIETY

Fellow members of the constituent Societies of the Michigan State Medical Society: We the members of the Berrien County Medical Society extend to you the most cordial of invitations to visit our community at the annual meeting of the Michigan State Medical Society in September.

We have attempted in this issue to tell you something about our Society, our cities,

wish to make an impression on you so that at any future time when you or your friends are looking for a place to enjoy yourselves, you will think favorably of the Twin Cities of Michigan.

We urgently request that you extend this invitation to your wives, whether or not they are members of the auxiliary, as our local women have completed plans to see that they are entertained during the entire time; that they are kept busy, and do not



**SONNER HALL AND CONGREGATIONAL CHURCH
Benton Harbor**

and our health facilities, in other words the usual "booster club blah." However, man to man, we are going to do our best to make your visit worthwhile. The various section officers have arranged an unusually good program and we have tried to provide pleasure for you in the leisure time.

Our hotel facilities are ample, and, as you can see from the list, there are accommodations to suit every pocketbook. Our more reasonable places are decent, clean and attractive. Our expensive places were designed to give you all the luxuries found in any of the resort centers of this country. We have held conferences with the hotel managers and we can assure you that you will not be preyed upon because you are making a short visit. In other words, they

have to depend upon friend husband to provide transportation or company.

We trust that you will appreciate the slogan of our Society, "For Knowledge and Fellowship," and to this end we will endeavor to make your visit worth while and entertaining.

It is our contention that most of the members attending the meetings drive their own cars, and with this in mind we will have members of the Boy Scouts present at the roads leading into the city to act as guides. If you have your reservations they will guide you to your hotel and there you will find an information desk for any other particulars you may wish.

When you register get an M. S. M. S. visitor's sticker for your car so that outside

of flagrant violations you will be protected by the police. If you come by bus, train, interurban or boat, hail any car with an M. S. M. S. courtesy sticker and you will be transported wherever you wish.

Any of you who wish to arrange golf



J. J. McDERMOTT, PRESIDENT
Berrien County Medical Society

matches may play them at the Twin City Golf and Aviation Club or the Berrien Hills Country Club, either of which are sporty courses. Any others who wish to play away from the angry mob may travel three miles out of St. Joseph to the Martin Hills Golf course or five miles out to the Tabor Golf course at Kings Landing outside of Benton Harbor. Last minute arrangements can be made on your arrival as there is plenty of room for all.

The African golf players will have to seek their own courses, although it is said to be a popular game in this part of the world.

Any sections or groups who wish to hold special dinners or banquets can make arrangements direct with the hotels or write to the Chairman of the Entertainment Committee, Dr. L. M. Rutz, of Niles, or to the Secretary, W. C. Ellet, at Benton Harbor.

It is requested that if you are a delegate or an officer that you send in your reservations at once to the Hotel Whitcomb in St. Joseph or if you do not plan to be here on Monday but are coming for the Scientific sessions on Tuesday and Wednesday we advise you to make reservations in the Benton Harbor hotels.

If you stay in St. Joseph and do not drive your own car there will be courtesy cars plainly marked that will transport you the short distance to the Harbor. Those who stay in Benton Harbor are within easy walking distance of the meeting place.

We want to do everything in our power for your enjoyment and if anything goes wrong with your accommodations or treatment we will appreciate the complaint and attempt to adjust matters.

Come early and stay late. Don't forget that primarily you are here for knowledge, but when your head gets too stuffy or after school is out there are plenty of places to play. To those of you who wish to get boiled out in the morning try a famous Benton Harbor-St. Joseph mineral bath and start out for the meeting full of pep.

Here's how! If you don't enjoy yourself it won't be our fault. Grease up the car, load the tank, buy your ticket if you come by rail, grab the wife and off for The Heart of the Fruit Belt, where Nature smiled and gave her all, and Man grinned and toiled at her beck and call, developed her wealth into joy and health, for you to perceive, partake and share, in all of the bounteousness available there.

BERRIEN COUNTY MEDICAL SOCIETY,
W. C. ELLET, *Secretary*.

BENTON HARBOR AND ST. JOSEPH THE TWIN CITIES OF MICHIGAN

Although commonly called Twin Cities, in regards to ages the cities of Benton Harbor are more like mother and child as St. Joseph was one of the earliest settlements on the west coast of Lake Michigan, while Benton Harbor dates back to the boom following the Civil War.

St. Joseph was founded at the mouth of the old St. Joe river by the early French and Spanish explorers. There are still said to be evidences of the old settlement found in the shifting sands of the nearby dunes.

Furs and grain and lumber were floated down the St. Joseph river and carried by boat to Fort Dearborn which later became

Chicago, and trade of this early day is still carried on by the methods of modern transportation. Massive freight and passenger boats still carry a great bulk of the traffic to Chicago while the railroads, trucks and cars supplement the older but cheaper method of handling freight and passengers.

Across the river from the early settlement of St. Joseph was a marsh built up by the flood waters of the river, and beyond this were wooded sand hills, or, as they have in recent years become known, the Sand Dunes of Lake Michigan. An old corduroy road led from the hills across the marsh to the ferry at the river. The road was impassable in the early spring, being covered with water often three or four feet in depth.

However, one woodsman with vision started a lumber mill whose specialty is now a lost art, that of manufacturing of bungs for the wine and cider barrels. A little settlement of hardy lumbermen and farmers soon formed, hard drinkers and hard workers, and the mother town of St. Joseph across the river named the settlement Bung Town.

The Bung Towners found that methods of transportation were poor, because of the marsh, and so built a ship canal from the St. Joseph harbor through the swamp to the higher ground at the foot of Morton and Bronson hills, so named because of the men who owned the property. The guiding spirit of that early booster club was a man named Benton and the settlement of Bung Town became incorporated into a village and named it Benton's Harbor.

With the canal and the railroad the town began a steady growth until today it has more than doubled the size of its mother city of St. Joseph and they are now called Twins.

The advent of the fruit industry, when it was discovered that Lake Michigan so tempered the cold winds that there are spots of land called frost proof, made the Twin Cities the natural market points for distribution.

This strip of land only 15 miles wide and about 30 miles long became known as the Fruit Belt of Michigan, and its apparently barren sands have given so generously that the Fruit Belt of Michigan is rated without doubt as the second most fertile spot in the United States.

After the fruit came the factories, the ready access to labor, the transportation by

land and water, the diversity of industry have made the communities grow. Following along with the growth of industry all over the central states, the Shores of Lake Michigan, because of their accessibility as well as beauty, became the natural and logical place for summer resorts.



W. C. ELLET, SECRETARY AND TREASURER
Berrien County Medical Society

Now Benton Harbor and St. Joseph have become known not only as the Heart of the Fruit Belt, but also as the Resort Cities of Southwestern Michigan, and have factories so diversified in their output that there is hardly a community in the world that does not have some article manufactured in the Twin Cities.

Drilling for oil thirty or more years ago brought forth not an oil but a healing water. The famous mineral water of Benton Harbor and St. Joseph, loaded with its magnesium salts and sulphur, actually does relieve that tired feeling of the jaded business man, who is resting at the nearby resorts. Even though the medical profession have seen so much of exploited cures, the local fraternity readily admit the beneficial effect in chronic rheumatics and nephritis after bathing in these mineral waters. The sooth-

ing effect of the hot salts solutions, empiric though it may be, does give relief.

The mystery of so many well equipped and large hotels is explained by the mineral baths and the resort facilities. When you lay your plans for the State Medical Meeting in the Twin Cities in September you

thousand mineral baths annually places them high as a health resort, and they annually entertain more individual pleasure resorters than any other community in the state. Business is never all bad here. The Twin Cities are always going good, because of so many avenues of revenue.

In hotel rooms they rank fourth among the cities of the state; have five golf courses, an airport, the most miles of hard surface roads in the state (except Wayne County). They are located on U. S. Highway No. 12 and 31; have three railroads, the Goodrich Transit Company, one interurban, a first class street railway system and several bus lines. The theaters are handled by the Butterfield circuit; large dancing pavilions, bathing beaches and amusement parks, (including the House of David).

Few places, indeed, have been so favored by nature in every respect as have the Twin Cities. Situated on the high bluffs on each side of the St. Joseph river, overlooking the broad expanse of Lake Michigan, and the junction point of the Paw Paw and the historic St. Joe in the low land between, is the wonderful setting of these two communities. The air is kept fresh and clean by the prevailing westerly breezes, and extremes of heat and cold are rare and of short duration. The cities have a good natural drainage and enjoy great freedom from epidemic disease.

A visit to this delightful community will be long remembered. September is usually one of the most delightful months. Come for your business and learning and then tarry with us if you will as long as you like to play.

HOSPITALS AND HEALTH FACILITIES OF BENTON HARBOR AND ST. JOSEPH

By C. N. SOWERS, M.D.

Benton Harbor and St. Joseph are well provided with hospital and health facilities. Prior to 1900 when the communities were about one fourth their present size there were no hospital facilities and operative cases were forced to go the ninety miles to Chicago.

With the growing demand for hospital beds the late Dr. H. V. Tutton, pioneer surgeon of this district, established a small private institution which afterwards proved to be the nucleus of the present hospital.



HOTEL VINCENT, Benton Harbor

will know, if you have not already paid an extensive visit, that you are going to enjoy the pleasures of:

"The center of the Michigan Fruit Belt, where nature gave so lavish of all she had, woods, streams, lakes, hills, and smiled while man added orchards, camps, paved roads, golf, aviation and all the sources of pleasure to be found anywhere, conveniently centered in and about the Twin Cities of Michigan. The center of the resort section and capital of the fruit industry of lower Michigan."

In the summer and early fall here may be found the luscious melons, peaches, apples and grapes, besides all the pleasures in sports and amusements that one would find at any vacation spot.

Most cities are able to advertise one occupation or product as their principle asset to attract attention from the outside world. Here one finds four; combined they are fifteenth in the State in industrial value; the largest municipal cash fruit market in the world gives them their horticulture standing; giving one hundred and twenty-five

This early attempt at providing a suitable place showed the people the necessity for a hospital. Under extremely meager facilities, and what would seem to most of us today as dangerous procedures, the physicians of the community worked with Dr. Tutton, made a success, and built a reputa-

directors. The staff is under the leadership of a chief elected by the attending physicians. Dr. H. V. Tutton was Chief of Staff from the beginning to his death four years ago, when the writer of this article was given that honor.

Almost complete facilities for the staff



HOTEL WHITCOMB, St. Joseph

tion for care and safety in their little old converted house.

In February of 1904 articles of incorporation were formed for the establishment of a Public Hospital and Training School for Nurses, known as the Benton Harbor Hospital Association. Benefactions from a few public spirited citizens, notably George F. Sonner, Professor and Mrs. Owen, and A. R. Nowlen, with a balance raised by popular subscription, provided the initial funds. A site of four acres was purchased, and the present Mercy Hospital became a reality, opening for the reception of patients in 1907.

Since that time an annex has been added, doubling the original building's capacity. Fifty beds are now available besides a home for nurses. The Training School for Nurses has been constantly maintained under high standards and an associate course provided with the Children's Hospital in Detroit, also Grace Hospital, Detroit.

The staff is an open one, membership being by election of the members. The administration is carried out by a board of

are provided, a laboratory with full time technician and an excellent modern X-ray plant.

Almost since its inception the hospital has been self-supporting. Yearly subsidies by the city and private individuals are for comparatively small amounts.

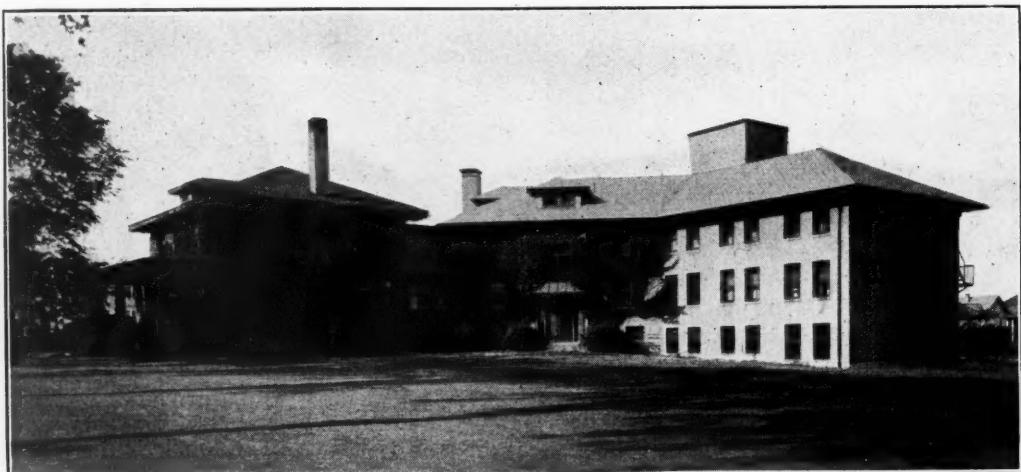
Tentative plans for enlargement according to the growth of the community have been laid and the ground purchased in the original grant is available.

In addition to the public hospital in Benton Harbor the Twin Cities have two private institutions. One in St. Joseph, known as the St. Joseph Sanitarium, is controlled and operated by Dr. T. G. Yeomans. Dr. Yeomans, a surgeon, has several men associated with him on his regular staff. The institution has been in successful operation for a period of 15 years and is completely equipped with all the necessary facilities, and is on the recognized list of the College of Surgeons. While operated as a closed hospital the institution is open to physicians of Berrien County for referred work, and is the only hospital in St. Joseph.

The other hospital, owned and operated by Dr. R. B. Taber, is in Benton Harbor and incorporated under the name of The Britain Sanitarium. This is also a private institution with a staff of associated physicians. Like the St. Joseph Sanitarium, it is open to physicians of Berrien County for

usually the busiest month of the year for the profession.

The bath hotels, of which there are five, attract large numbers of chronics at all times of the year but more particularly in the summer. Practically all these hotels have house physicians who are members of the Berrien



ST. JOSEPH SANITARIUM, St. Joseph

referred cases. This hospital has been in operation since 1920 and is well and favorably known in the community.

The health work of the communities is carried out under the respective city governments. Both towns employ a part time Director of Public Health and city nurses. The schools are cared for by their own nurses appointed by the school boards.

There are no municipal clinics. Indigent cases come under the care of welfare workers and the public health nurses. Where medical attention is necessary the patient is allowed to choose his own physician and the bill for medical services is certified by the social workers and paid by the municipal governments. A reasonable fee is allowed and there is very little criticism on the part of the public or the medical profession.

As an example of the efficiency of this system, in the figures released for infant mortality in Benton Harbor three years ago, this town was second low of all the cities of its size in the United States.

Contrary to the usual busy season for doctors in the winter months for other parts of the state, the summer season carries the peak load for this community. During the summer months the population usually trebles due to the resorters, and August is

County Society. The mineral water is loaded with sulphur and magnesium sulphate in almost saturated solution. Each bath house has its own wells which average from 800 to 1,200 feet in depth.

Whether it is due to psychic reactions, or rest, the fact remains that chronic rheumatics are greatly benefited by the mineral baths. The bath houses have been in operation for over 25 years and have many enthusiastic followers who come here year after year on advise of their physicians in distant cities.

Living conditions in the Twin Cities and vicinity are almost ideal, and while we have all the advantages of community life in the small town, we are also within commuting distance of Chicago and able to enjoy all the advantages which are obtainable only in the largest of cities, without the disagreeable features which are unavoidable when living in a metropolis.

The various hospitals invite all who are interested in visiting them during the convention, and while we realize that the majority of hospitals on the whole are alike and therefore uninteresting to the average physician, who must of necessity visit them daily, still there are a few interested in hospital administration who will be cordially received.

HISTORY OF BERRIEN COUNTY MEDICAL SOCIETY

By F. J. WITT and ROBERT HENDERSON
TWIN CITY ORGANIZATION

The present Berrien County Medical Society was organized in 1897, succeeding a defunct organization which had ceased to exist some years before, and reaching out to bring in the unorganized men practicing in the communities outside of the county seat of St. Joseph. Some of the charter members of this group of early physicians are still alive and in active practice, many of the others, though passed on for years, still have many tender memories alive in the hearts of the people of this community.

Among the men who organized this Society were Drs. John and George Bell, H. V. Tutton, A. H. Scott, Suydan Ryno, deceased, and in active practice are Drs. W. L. Wilson, and Hattie Schwendener, who just recently completed 50 years of active practice, besides the writer.

The present organization has continued uninterruptedly ever since, and it is probably not unique that at times it barely functioned, but never really died or demanded reorganization. The most serious crisis was when it fell in line with the State Medical Society under its new charter which broadened the original requirements for membership. Many of the older and leading men in the profession withdrew from the Society and never took any interest in it again. Crippled though the organization was, by the loss of men of standing, it did continue to exist. Added enthusiasm was given by attendance of members from the south end of the county, which had long been held together by the leadership of the late Dr. Henderson, father of Dr. Robt. Henderson who has collaborated in the preparation of this short history of the Berrien County Society.

At present we have a very live and active organization, rejuvenated since the war by the many of its members who served in the Army and Naval Forces and welded into a harmonious society for the good of each other and to benefit the public.

Our meetings are held once every month except for the two months of January and February when due to the inclement weather and difficult travel the meetings are adjourned. In recent years it has been our custom to alternate the meeting places, one month in the south end of the county usually at Niles, and the next month in the north

end of the county at St. Joseph or Benton Harbor.

Because of the necessity of half of the membership under this plan driving 20 or 30 miles to attend a meeting it has been customary to have each meeting a dinner gathering. Our slogan may truly be said to be "For Knowledge and Fellowship." A great deal of attention has been given to making the meetings friendly as well as interesting and instructive. It is fair to assume that we have succeeded, as the interest has not only kept up, but has increased. When exceptional meetings are held, invitations are exchanged with the Kalamazoo Academy and the St. Joseph County Medical Society of Indiana composed of the physicians of South Bend, Elkhart and Nishawakee. Many warm friendships have been formed in this manner with the physicians from these other communities, and the exchange of ideas has greatly aided us. Our geographical position, which always before has kept us isolated from the State Society seeking instead Chicago and South Bend for clinical and post-graduate instruction, has been gradually welded to the north and east by this policy so that in recent years by our united efforts the other county societies of the Michigan State Society have heard of our existance.

The friendly relations with the Kalamazoo Academy and the Cass Society of this consular district has brought about a joint association with the Cass County Society, many of whose members because of their proximity to Kalamazoo have previously held joint membership with the former society. Now the Cass County Society, while still maintaining their own identity and officers, attend the meetings of the Berrien County Society and quarterly act as hosts to the latter. This association has been very pleasant for both societies. The Cass members, because of their much smaller numbers were formerly unable to secure speakers without the embarrassment of providing a small audience, and under the new arrangement they attend the Berrien meetings and swell the attendance of our organization.

With the attendance of these visitors our average number present at meetings in the past few years has been consistently over 100 per cent of the total membership.

SOUTH BERRIEN AND NILES ORGANIZATION

The early days of organized medical activity in and around Niles were extremely

interesting, and through the close association with my father, before I even considered the study of medicine, I came into contact with many incidents which remain fresh in my mind.

What was probably the first diphtheria anti-toxin administration in the county was a humorous affair, in some respects. Obtaining a supply of the serum, Dr. Henderson drove out in the country to the diphtheria case. The father of the child was determined that no experimenting was going to be done on his child. A strong, husky friend persuaded the child's father to go out to the barn where he was forcibly detained while the antitoxin was injected.

The marked recovery sold diphtheria anti-toxin to the community and the irate parent became not only a strong booster for the preparation but for the doctor as well.

Niles was quite a prominent village, being one of the oldest settlements in the state and having the distinction in its lifetime of being under the command of four different nations. Nearly always in the early days there was a physician at the post, or, if not, the medical work usually fell on the hands of the local priest or the sick would be transported up the river to the church and school at the south bend of the river where a Jesuit settlement had been founded. This settlement and school later became Notre Dame University and the village nearby the city of South Bend, Indiana.

Niles has always been a transportation center. In the early days the boats came up the river from St. Joseph and the rafts and barges coming down from as far up as Three Rivers and Mendon, at which latter place another settlement of French Catholics was located. Then later the main line of the Michigan Central from New York to Chicago and the establishment of the large freight yards from which the huge through freights are made up for both east and west.

From this brief history of our end of the county it can be seen that while acting nearly always as a depot town and then city our local profession has been in constant contact with the physicians in the nearby towns, so that it was but natural that the local men should join the association of professional men of the county and were instrumental in its inauguration.

The earliest recollection I have of a Berrien County Medical Society was in 1889, when I drove with my father, then practicing in Buchanan, to Cassopolis where the

Berrien and Cass County Societies held a joint meeting at Forrest Hall, Diamond Lake. Dr. Green of South Bend, a surgeon, was the speaker of the afternoon, and the recent re-association with the Cass County Society shows the repetition of history.

About once a year my father would go to St. Joseph, on the train, and attend a medical meeting of the old Berrien County Society that Dr. Witt mentioned in the first part of this article as the forerunner of the present organization, and I remember distinctly of a meeting in Buchanan in 1893 in which Dr. Henderson gave a report of several cases of diphtheria which he had successfully treated with antitoxin, the first to be used in southwestern Michigan. This was the year that he was president of the Society.

Other pleasant little memories of the early physicians have been recalled, such as the proper and awe-inspiring ceremony of a consultation; the presence of Drs. Belknap or Bonnine from Niles, in Buchanan in frock coat and silk hat was soon noised about and it was but a matter of a few hours when the whole village was apprised of the fact that a consultation was in progress. One doctor in Buchanan always wore the frock coat and topper to uphold the profession in its lofty place and that was Dr. Berrick. The country calls of winter, the hazards of drifted roads, as none were kept open, and frequently a five-mile drive would mean an all-night trip. When such a trip was to beat the stork, the only aseptic precautions were a clean shirt. Very often when there were many country calls the doctor would be gone on his trip for twenty-four hours. It has been a constant wonder in my mind, in comparison with the present day practice of medicine, how they were able to attend to as much as they did. I believe it was the very vicissitudes of their calling which drew these men together in the bygone days and helped to organize for mutual benefit. Today we move so much faster that close co-operation is now necessary to keep abreast of the times, and so it is, that our Society in the past few years has been closely united and free of internal strife.

Three years ago we began the effort which resulted in the State Society choosing to meet in Berrien County in the Twin Cities of Benton Harbor and St. Joseph, firm in the belief that this location is ideal for "Fellowship and Knowledge." We believe you will enjoy your meeting here.

Official Program—110th Annual Meeting, Michigan State Medical Society—Benton Harbor, Mich., Sept. 15, 16, 17, 1930

OFFICIAL CALL

The Michigan State Medical Society will convene in annual session, in Benton Harbor, on September 15, 16 and 17, 1930. The provisions of our Constitution and By-Laws and the official program will govern the business and transactions of this annual session.

J. D. BROOK, *President*
 R. C. STONE, *Council Chairman*
 H. J. PYLE, *Speaker*.

Attest:

F. C. WARNSHUIS, *Secretary*.

DAILY SCHEDULE

Sept. 14—HOTEL WHITCOMB, ST. JOSEPH.
 6:00 P. M.—Meeting of the Council.

Sept. 15—HOTEL WHITCOMB, ST. JOSEPH.
 10:00 A. M.—House of Delegates.
 2:00 P. M.—House of Delegates.
 7:30 P. M.—House of Delegates.

Sept. 16—SONNER HALL, BENTON HARBOR.
 9:15 A. M.—Scientific Sections.
 1:30 P. M.—Scientific Sections.
 7:30 P. M.—First General Session.

Sept. 17—
 9:15 A. M.—Scientific Sections.
 12:00 M.—Second General Session.
 1:30 P. M.—Scientific Sections.

Registration: Sonner Hall.
 Scientific Exhibits: Sonner Hall.
 Commercial Exhibits: Sonner Hall.
House of Delegates: Meets in Ball Room of Hotel Whitcomb, St. Joseph, on Monday, September 15, at 10:00 A. M.

HOUSE OF DELEGATES

Place: Hotel Whitcomb, St. Joseph.
 Time: 10:30 A. M., September 15.
 Speaker: H. J. Pyle, Grand Rapids.
 Secretary: F. C. Warnshuis, Grand Rapids.

ORDER OF BUSINESS

1. Call to Order.
2. Roll Call and Report of Credentials Committee.
3. Speaker's Address—H. J. Pyle.
4. President's Address—J. D. Brook.
5. Annual Report of the Council—R. C. Stone.
6. Appointment of Reference Committees.
7. Election of Nominating Committee.
NOTE: No two members from one Councilor District shall be elected on the Nominating Committee.

Duty of Nominating Committee:

- (a) Supervise Ballot for President.
- (b) Nominate Vice Presidents.

(c) Nominate A. M. A. Delegates to succeed: C. S. Gosline, J. D. Brook, A. W. Hornbogen, and Alternates J. Wessinger, C. E. Boys and J. G. R. Manwaring.

(d) Designate place of next Annual Session.

8. Reports of Committees:
 Medical Education.
 Public Health.
 Legislation.
 Tuberculosis.
 Civic and Industrial Relations.
 Medical History.
 Delegates to the A. M. A.
 Venereal Prophylaxis.
9. Resolutions and New Business.
10. Recess.

SECOND SESSION 2:30 P. M.

1. Roll Call.
2. Report of Reference Committees.
3. Revision of Constitution and By-Laws.
4. Unfinished Business.
5. New Business.

THIRD SESSION 7:30 P. M.

1. Roll Call.
2. Report of Reference Committees.
3. Report of Nominating Committee.
4. Elections:
 - (a) Vice Presidents.
 - (b) Place of Annual Session.
 - (c) Delegates and Alternates to A. M. A.
 - (d) Councilors:
 First District
 Second District
 Third District
 - (e) Speaker.
 - (f) Vice-Speaker.
5. Unfinished Business.
6. Adjournment.

FIRST GENERAL SESSION

Place: Main Auditorium, Sonner Hall.
 Time: September 16, 7:30 P. M.
 President: J. D. Brook, Grandville.
 Secretary: F. C. Warnshuis, Grand Rapids.

1. Call to Order.
2. Invocation.
3. Welcome—President J. J. McDermot, Berrien County Medical Society.
4. Announcements—The Secretary.
5. In Appreciation—The Council.
6. President's Annual Address—J. D. Brook, Grandville.
7. Address: (Invited Guest)
8. Nominations for President.
9. Resolutions.

SECOND GENERAL SESSION

Time: September 17.
 Place: Sonner Hall.

1. Call to Order.
2. Report of Nominating Committee.
3. Introduction of President.
4. Resolutions.
5. Adjournment.

SCIENTIFIC SECTIONS

Section on General Medicine

Chairman: WM. NORTHRUP, Grand Rapids.
Secretary: MILTON R. SHAW, Lansing.

MORNING SESSION

September 16—9:15 A. M.

1. Chairman's Address — Dr. William Northrup, Grand Rapids.
2. "A Survey of the Pollen Situation in Detroit and Its Application in the Treatment of Hay Fever and Asthma" —Dr. George L. Walbott, Detroit.
3. "Therapeutic Application of Ultraviolet Radiation" —Dr. Willis Peck, Ann Arbor.
4. "Bacteriophage in Infectious Disease" —Dr. N. W. Larkum, Lansing.
5. "Diagnosis and Significance of Cyanosis, Hyperpnea and Allied Conditions" —Dr. Plinn F. Morse, Detroit.
6. "Intestinal Disorders: Necessity for Specific Diagnosis and Rational Therapy" —Dr. Elmer L. Eggleston, Battle Creek.

AFTERNOON SESSION

September 16—1:30 P. M.

7. "A Clinical Study of Myxedema in Michigan" —Dr. H. H. Riecker, Ann Arbor.
8. "Diagnosis of Mild Hyperthyroidism" —Dr. William Vis, Grand Rapids.
9. "The Neurological Side of Hyperthyroidism" —Dr. C. D. Camp, Ann Arbor.
10. "Hypometabolism, a Factor in High Blood Pressure" —Dr. Wilbur E. Post, Chicago.
11. "Arterial Hypotension" —Dr. M. A. Mortensen, Battle Creek.

MORNING SESSION

September 17—9:15 A. M.

SYMPOSIUM ON PEPTIC ULCER

Joint Meeting of Sections in Medicine and Surgery

1. "Medical Management of Peptic Ulcer" —Dr. Ralph C. Brown, Chicago.
2. "The Roentgenological Diagnosis of Peptic Ulcer" —Dr. A. W. Crane, Kalamazoo.

(See Surgery Section program for other papers this morning.)

AFTERNOON SESSION

September 17—1:30 P. M.

Election of Chairman and Secretary.

1. "Osteogenic Sarcoma: Report of a Case" —Dr. L. E. Holly, Grand Rapids.
2. "Electrocardiographic Observations on an Exposed Heart, with a Review of Bundle Branch Block Cases" —Dr. Paul S. Barker, Ann Arbor.
3. "Tachycardia" —Dr. Louis M. Warfield, Milwaukee.
4. "Cardiac Pain and Its Differential Diagnosis" —Dr. Hugo A. Freund, Detroit.
5. "Anemia of Nephritis" —Dr. L. E. Verity, Battle Creek.

Section on Surgery

Chairman: WALTER L. FINTON, Jackson.
Secretary: GROVER C. PENBERTHY, Detroit.

MORNING SESSION

September 16—9:15 A. M.

1. Chairman's Address: "The Group Practice of Medicine" —Dr. Walter L. Finton, Jackson.
2. "Chronic Appendicitis" —Dr. Frederick A. Collier, Ann Arbor.
 Discussion —Dr. R. C. Stone, Battle Creek; Dr. G. A. Seybold, Jackson.
3. "Gall-bladder Disease, Diagnosis and Indications for Operation" —Dr. Roy D. McClure, Detroit.
 Discussion —Dr. C. D. Brooks, Detroit; Dr. Charles E. Boys, Kalamazoo.
4. "Fractures" —Dr. Paul A. Magnuson, Chicago.
 Discussion —Dr. F. C. Kidner, Detroit; Dr. F. C. Warnshuis, Grand Rapids.

AFTERNOON SESSION

September 16—1:30 P. M.

5. "Thyroidism with Unusual Clinical Manifestations" —Dr. Max Ballin, Detroit.
 Discussion —Dr. Henry J. Vanden Berg, Grand Rapids; Dr. Plinn F. Morse, Detroit.
6. "The Treatment of Acquired Contractures of the Hand" —Dr. Sumner L. Koch, Chicago.
 Discussion —Dr. Edward C. Davidson, Detroit; Dr. A. C. Hall, Detroit.
7. "Modern Trend in Anesthesia" —Dr. Frank J. Murphy, Detroit.
 Discussion —Dr. Myra E. Babcock, Detroit; Dr. Wm. T. Shannon, Detroit.

8. "Medical Diathermy in Urology"—Dr. Robert McArthur, Detroit.
Discussion—Dr. Alvin Thompson, Flint; Dr. Robert E. Cumming, Detroit.

MORNING SESSION
September 17—9:15 A. M.

JOINT MEETING OF MEDICAL AND SURGICAL SECTIONS

Symposium on Duodenal and Gastric Ulcer

1. "The Cause and Control of Gastric Acidity"—Dr. George W. Crile, Cleveland.
2. "Medical Management"—Dr. Ralph C. Brown, Chicago.
3. "Roentgenological Diagnosis"—Dr. A. W. Crane, Kalamazoo.
4. "Surgical Management"—Dr. E. Starr Judd, Rochester.
5. "Marginal Ulcer"—Dr. Norman M. Allen, Detroit.

AFTERNOON SESSION
September 17—1:30 P. M.

Election of Officers.

1. "End-Results in Cancer"—Dr. Richard R. Smith, Grand Rapids.
Discussion—Dr. C. W. Halliday, Detroit; Dr. Harry C. Saltzstein, Detroit.
2. "Intestinal Obstruction"—Dr. Harry B. Knapp, Battle Creek.
Discussion—Dr. J. G. Manwaring, Flint; Dr. Wm. R. Clinton, Detroit.
3. "The Management of Filiform Strictures and Their Complications"—Dr. Reed M. Nesbit, Ann Arbor.
Discussion—Dr. Harry W. Plagmeyer, Detroit; Dr. Wm. J. Butler, Grand Rapids.

Section on Gynecology and Obstetrics

Chairman: HAROLD HENDERSON, Detroit.
Secretary: HARRY M. NELSON, Detroit.

MORNING SESSION
September 16—9:15 A. M.

1. "Sterility: Its Management in an Organized Clinic"—Alexander Campbell and J. Duane Miller, Grand Rapids.
2. Title to be announced—Dr. Wilkins, Ann Arbor.
3. Title to be announced—Clarence E. Toshack, Saginaw.
4. "The Use of X-ray in Obstetrical and Gynecological Diagnosis"—Irving F. Stein, Chicago.

AFTERNOON SESSION
September 16—1:15 P. M.

1. "Ascheim-Zondak Test for Pregnancy"—Harold Mack, Detroit.
2. "Relation of Pelvic Inclination and Lumbar Index in Obstetrics"—Cleary Swanson, Detroit.
3. "Atrophic Vulvitis and Cancer of the Vulva"—M. Smeltzer and H. M. Nelson, Detroit.
4. "Diagnosis of Contracted Pelvis"—David S. Hillis, Chicago.

MORNING SESSION
September 17—9:15 A. M.

1. "Use of Avertin in Obstetrics and Gynecology"—J. M. Pierce, Ann Arbor.
2. "Dermoid Cysts of the Ovary"—Harold Furlong, Pontiac.
3. Title to be announced—Carey Culbertson, Chicago.
4. "Trichomonas Vaginalis Infection of the Vagina"—George Kamperman, Detroit.

AFTERNOON SESSION
September 17—1:15 P. M.

Election of Officers.

1. "Eclampsia, A Preventable Disease"—E. B. Anderson, Grand Rapids.
2. Title to be announced—Paul W. Willets, Grand Rapids.
3. Title to be announced—F. H. Falls, Chicago.

Section on Pediatrics

Chairman: T. D. GORDON, Grand Rapids.
Secretary: JOHN PARSONS, Ann Arbor.

MORNING SESSION
September 16—9:15 A. M.

1. "Behavior Disorders in Childhood and the Relation to the Pediatrician"—Dr. Louis A. Schwartz, Director Clinic for Juvenile Research, Detroit.
Brief discussion of the history and newer aspects of mental hygiene. In our Detroit Clinic for Juvenile Research, Yale University, we are endeavoring to correlate and evaluate the sociological, familial, physical, laboratory, psychological and neuro-psychiatric findings in a series of young, delinquent children, who are being studied over a five-year period, in order to determine some of the underlying mechanisms of conduct.
2. "Behavior Problems in School Children"—Willard C. Olson, Associate Professor of Education, and Director

of Research in Child Development, University of Michigan, Ann Arbor. The paper will be concerned with the discussion of some of the common conduct disorders and nervous habits in children and their relation to such factors as age, sex, intelligence, school achievement, family history, habit formation, nutritional status, fatigue and imitation. The topic will be introduced by a brief account of the program in child development being initiated by the University of Michigan.

3. "Child Guidance"—Dr. Leo Henry Bartemeier, Detroit. Practical experiences of a psychiatrist working with a group of Pediatricians on a consultation basis over a period of six months; nature of problems encountered; methods employed and therapeutic results obtained from said procedure.
4. Title to be announced—Orus Ray Yoder, M.D., Assistant Superintendent Kalamazoo State Hospital, Kalamazoo.

AFTERNOON SESSION

September 16—1:30 P. M.

1. "Tuberculosis in Children"—Dr. Henry D. Chadwick, Detroit. The type of disease as shown in infants and very young children reveals the evolution of the disease from the very early to the later phases showing partial healing by fibrosis and calcification. The different phases are illustrated by lantern slides. A discussion of the type of cases that should have special treatment.
2. "The Diagnosis and Treatment of Pulmonary Tuberculosis in Childhood"—Dr. Daniel Budson, Ann Arbor. A consideration of experiences with tuberculosis in childhood at Dr. Armand-Delille's Clinic in Paris. Early lesions in childhood and methods of diagnosis. Discussion of his treatment.
3. "Specific Infections of Infancy and Childhood"—Dr. Isaac A. Abt, Professor of Pediatrics, Northwestern University, Chicago.
4. "Diagnosis and Treatment of Acute Osteomyelitis in Children"—Dr. Grover C. Penberthy, Associate Professor of Surgery, Detroit School of Medicine.

Brief discussion of the usual history presented by these patients with a review of the incidence of this disease in different classes of children. A practical plan for working out the diagnosis and careful consideration of the treatment.

MORNING SESSION

September 17—9:15 A. M.

1. "Chronic Nephritis in Children"—Dr. M. Cooperstock, Ann Arbor. Discussion of the various types and frequency of chronic nephritis in children. Comparison with the chronic nephritis of adults. Consideration of some of the outstanding clinical features of chronic nephritis with special reference to

the significance of certain related alterations in the blood chemistry.

2. "Kidney Functional Test"—Dr. Floyd H. Lashmet, Ann Arbor. This paper will be concerned with a discussion of the various types of kidney functional tests and their evaluation. Description of the technic used in our clinic.
3. "Acidosis, Alkalosis and Dehydration"—Dr. Alexis F. Hartman, Associate Professor of Pediatrics, Washington University, St. Louis, Mo. The chemical composition of the body fluids and the normal means of their maintenance are illustrated. The effects of various abnormal conditions which lead to dehydration with acidosis or alkalosis are then discussed. A simple rational means of therapy is then presented.
4. "Diagnosis and Treatment of Common Skin Diseases in Childhood"—Dr. Clark W. Finnerud, Assistant Clinical Professor of Dermatology, University of Chicago, Chicago. This paper will include discussion of eczema, seborrheic dermatitis, impetigo, scabies, ringworm, birthmarks and other affections.

AFTERNOON SESSION

September 17—1:30 P. M.

Election Chairman One Year.

1. "The Prevention of Rickets in Premature Infants by Use of Viosterol"—Dr. Earl W. May, Detroit. It is clearly demonstrated in this paper that rickets can be prevented in premature infants by the use of Viosterol if dosage is sufficient. The material in this paper covers 1½ years' work on a large series of cases that has been checked clinically and through blood chemistry studies and X-ray.
2. "Clinical Use of Viosterol"—Dr. Henry G. Poncher, Chicago. In our work we have established a daily minimum prophylactic dose for the average normal infant from birth to one year. Premature and rapidly growing infants demanded special consideration.
3. "Relation of Diet to Dental Caries"—Dr. R. W. Bunting, Professor of Oral Histology and Pathology, School of Dentistry, Ann Arbor. This paper will be a review of the recent experimental work that has been done by several different groups on the relation of diet to the decay of teeth. An analysis and review of the work of May Mellanby, Sherman Davis and M. T. Hanke will be given and the results of a feeding experiment which we ourselves have conducted, including over 400 children in whom dental decay was almost entirely eliminated over a period of one year.
4. "Report of a Case"—Dr. Elmer L. DeGowin, Ann Arbor. Anaphylactic shock following tetanus antitoxin given in small and divided doses. Brief review of the literature.

Section on Ophthalmology and Otolaryngology

MORNING SESSION

September 16,—9:15 A. M.

Round Table Conferences:

Eye Section: Dr. Harry Gradle, Chicago
 Ear, Nose, Throat Section: Dr. A. C. Furstenberg, Ann Arbor

AFTERNOON SESSION

September 16—1:30 P. M.

1. Chairman's Remarks.
2. "A Statistical Analysis of Ophthalmic Patients"—Dr. Harry Gradle, Chicago.
 Discussion opened by: Dr. Parker Health, Detroit; Dr. John R. Rogers, Grand Rapids.
3. "Carcinoma of Larynx"—Dr. A. C. Furstenberg, Ann Arbor.
 Discussion opened by: Dr. James T. Mills, Grand Rapids; Dr. Don M. Campbell, Detroit.
4. "Anesthesia in Head and Neck Surgery: Various Types and Methods"—Dr. Reuben Mau-rits, Grand Rapids.
 Discussion opened by: Dr. Chas. W. Ellis, Lansing; Dr. A. R. McKinney, Saginaw.
5. "Hysterical Mastoiditis"—Dr. Carl McClelland, Detroit.
 Discussion opened by: Dr. C. T. Proutt, Detroit; Dr. Emil Amberg, Detroit.

MORNING SESSION

September 17—9:15 A. M.

Round Table Conferences:

Eye Section: Dr. Walter Parker, Detroit
 Ear, Nose, Throat Section: Dr. Samuel Iglauer, Cincinnati

AFTERNOON SESSION

Election of Chairman and Secretary

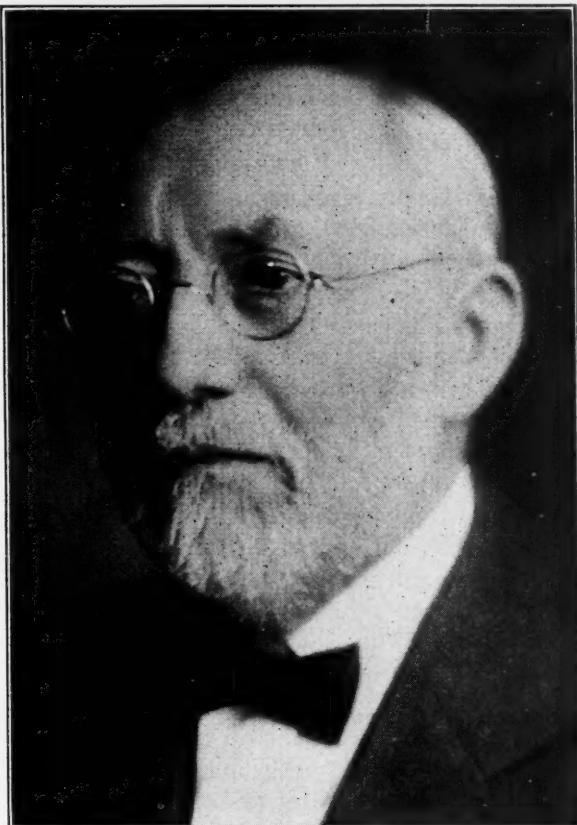
1. "Deep Suppuration in the Pharynx and Neck as it Concerns the Laryngologist"—Dr. Samuel Iglauer, Cincinnati.
 Discussion opened by Dr. Neil I. Bentley, Detroit; Dr. Carl G. Wencke, Battle Creek.
2. "Detachment of the Retina"—Dr. Walker Parker, Detroit.
 Discussion opened by: Dr. Dean W. Meyers, Ann Arbor; Dr. Howell L. Begle, Detroit.
3. "Iodized Oil Injection into the Sinuses"—Dr. E. L. Whitney and Dr. H. P. Doub, Detroit.
 Discussion opened by: Dr. Robert H. Fraser, Battle Creek; Dr. Wm. E. McGarvey, Jackson.
4. "Radical Surgery of the Frontal Sinus"—Dr. H. O. Westervelt, Benton Harbor.
 Discussion opened by: Dr. Ferris Smith, Grand Rapids; Dr. J. K. Heckert, Lansing.

The mind, the intelligence of man, is a visible brain; what you hear is largely gossip; what you smell isn't always pleasant and what you taste may be perverted. But after all, you can get certain things that you can reach with your hands but the progress of medicine has been visual because the brain is visual.—Dr. William J. Mayo.

SOCIETY ACTIVITY

FIFTY YEARS OF SERVICE: JOHN VANDERLAAN

Midst the reflection of golden yellow, typifying the harvest's richness, the medical profession of Muskegon and vicinity record-ed their tribute to their fellow member, Dr. John Vanderlaan. The revered doctor has served his fellowmen over a period of fifty years.



DR. JOHN VANDERLAAN

As an anniversary celebration of his fiftieth year of service in public life Dr. Vanderlaan was honored at dinner given at the Hackley Hospital dining room at noon to-day with members of the hospital staff, the board of trustees, the board of education, and friends hosts for the occasion.

Dr. F. W. Garber, Sr., presided as chief of staff at Hackley Hospital, an office that was first held by Dr. Vanderlaan, and presented to the honor guest the gift which ex-pressed the admiration and respect of those who have been associated with him. Toasts were given by C. W. Marsh, representing the board of education, on which Dr. Vander-

laan has served for thirty-eight years, eighteen of which he has been president; and by Dr. Archibald Hadden, president of the board of trustees of the hospital, and by Dr. George L. LeFevre, chairman of the board of the Hackley Union National Bank, of which Dr. Vanderlaan is vice president. Dinner invocation was pronounced by Rev. Henry Veltman, pastor of the Central Reformed church, attended by Dr. Vanderlaan.

On the frontispiece of the booklet which was presented Dr. Vanderlaan are written in illuminated gold lettering done by hand these words:

John Vanderlaan, A.M., M.D.
Well Loved Physician
Wise Counselor
Educator
Friend

A short text also in hand lettering of a beautiful medieval print beautifully expresses the sentiment of his colleagues. It follows:

"For half a century he has lived among us as an example of that fine type of professional manhood attained by the physician devoted to the high ideals of his calling.

"Unattracted by the insistent calls of a growing commercialism, he has held steadily to the primal purpose of his calling—reverent service to the sick and to the suffering, and a constantly increasing knowledge of how to serve. He has been quick to know the value of the new and to make it the servant of the old.

"The work done by him in the pre-hospital days, based as it was on his deep knowledge of the underlying and unchangeable principles of asepticism and wound healing, would do credit to the best of today.

"His interest in the development of Muskegon hospitals was keen and his aid invaluable.

"It is a privilege and a stimulus to high endeavor to be the associates of this modest, kindly and scholarly gentleman, and we have a very real pleasure in thus attesting our friendship and our great regard for him."

The script is autographed by members of the board of education, the hospital staff, and the board of trustees who have known him during his years of service.

The dinner appointment carried out the anniversary observance with individual cakes bearing lighted candles in shades of golden yellow, American beauty roses beau-

tifying the tables, where covers were laid for 80 guests.

The felicitations and good wishes of the profession were conveyed to the doctor in a telegram that was read at the dinner.

F. C. W.

ANNUAL MEETING—BENTON HARBOR-ST. JOSEPH—Sept. 15-16-17

Many factors made it absolutely impossible to publish all of the preliminary program in this issue. The complete program will appear in the September issue. The assurance is given that a most educational program, with many distinguished speakers, is in preparation. It is a program that merits a large attendance, for it will be of intense value to every member. Note the dates and plan to attend. Write for your hotel reservations today. A list of hotels will be found in this issue.

F. C. W.

ENTERTAINMENT PROGRAM OF
MICHIGAN STATE MEDICAL
SOCIETY ANNUAL
MEETING

Benton Harbor and St. Joseph
September 15, 16 and 17
For Women
Monday

Morning—Reception of wives of Delegates at Hotel Whitcomb in St. Joseph.

Afternoon—Courtesy rides through Fruit Belt, House of David and along Lake Michigan. Golf for women at Berrien Hills Country Club. Informal bridge tables in Hotel Whitcomb gardens.

Evening—Bridge party, Lobby of Hotel Whitcomb. Dancing in Outdoor Ball Room of Hotel Whitcomb (Regular Whitcomb Dance Program).

Tuesday

1:00—Luncheon and Bridge, Berrien Hills Country Club.

4:45—Excursion Ride on Lake Michigan. Large Goodrich passenger ship.

Evening—Special Show, Liberty Theater, Benton Harbor.

Wednesday

10:30 A. M.—Special Style Showing, courtesy Shepard & Benning, St. Joseph.

11:30 A. M.—Courtesy rides through the Fruit Belt for those missing out on Monday.

Courtesy cars will be provided at all times

for the visitors and special privilege placards provided for all cars. Special trips will be arranged for those who wish, and open privileges for golf fans at all hours at the Berrien Hills and Twin City Golf Courses. Information and registration booths will be maintained at the Whitcomb Hotel in St. Joseph and Sonner Hall in Benton Harbor. The bridge prizes will be worth playing for, and the Berrien County women, under the leadership of Mrs. Henry Bartlett of St. Joseph, promise to keep every woman visitor entertained from the time she arrives until departure.

Husbands will not have to worry about their wives' transportation or entertainment once they are registered.

For Men

Monday

Evening—Smoker and luncheon for officers and members of House of Delegates. Hotel Whitcomb.

Tuesday

4:45 P. M.—All who wish may go on the excursion ride on Lake Michigan. A large Goodrich passenger ship will make about an hour's trip out in the lake.

For the golf bugs the Berrien Hills Country Club and the semi-public Twin City Golf Course and Martin Hills Club will be available at all times.

Those who wish amusement will find the Silver Beach Amusement Park a short walk from the Hotel Whitcomb. All the rides, dancing, etc. Visits may also be made to the House of David Amusement Park and the Zoo in Benton Harbor.

Monday, Tuesday and Wednesday there will be Courtesy Cars available in the late afternoon for rides through the Fruit Belt, or you can join the procession with your own car.

The Chambers of Commerce will provide small baskets of Berrien County fruit on Tuesday and Wednesday for souvenir gifts.

Special Privilege placards will be given to all who wish them when they register. Cars provided with these signs will be given extra consideration by the police of the Twin Cities. Garages are available near every hotel and a list will be sent out by the Chambers of Commerce.

Boy Scout guides will be available on Monday and Tuesday.

Physicians who wish to bring their wives

can park them with the Ladies Entertainment Committee until ready to leave for home and we will promise you that there will be no excuse on their part if they complain of being left to shift for themselves.

HOTELS—ANNUAL MEETING

Benton Harbor

Hotel Vincent.....	\$2.50 single to \$12 double
Hotel Premier	\$2.00 single and up
Hotel Michigan	2.00 single and up
Hotel Dwan	2.00 single and up
Hotel Benton	2.00 single and up
Hotel Fastland	1.50 single and up

St. Joseph

Hotel Whitcomb—	
	\$2.50 single and up to \$12.00 double
Hotel Dennis—	
	\$2.50 single and up to \$10.00 double
Hotel Lakeview—	
	\$2.00 single and up to \$8.00 double
Edgewater Beach Hotel—	
	\$7.00 per day American plan.

Above listed hotels are sufficient to accommodate all of the physicians and their wives who might attend. There are many others not listed because not first class, year around hotels but are available if necessary.

Hotel Whitcomb is to be headquarters in St. Joseph and Hotel Vincent in Benton Harbor.

Reservations may be sent direct to hotels or to the Berrien County Medical Society. A Hotel Committee has been appointed to see that all reservations are taken care of and communications may be addressed to Dr. F. J. Witt at St. Joseph or to the Secretary, Dr. W. C. Ellet of Benton Harbor.

F. C. W.

A. M. A. SESSION—DETROIT

Every doctor attending the Detroit session has formulated his opinion of the value of attendance. This comment is solely for the purpose of record, also to set forth certain activities.

Sufficient praise and commendation cannot be accorded to the Detroit profession and the local committee on arrangements. For months did they labor to perfect the details. The thoroughness of their efforts was ever apparent during the session. Their financial contribution exceeded \$22,000.

They deserve our hearty thanks. We are all proud of them.

On Sunday, June 22, the Board of Trustees held their meeting on board of Mr. Oakman's private yacht. This was secured through the efforts of Dr. Angus McLean. The trustees transacted their business as a trip was run to Marine City, returning at 5:30 P. M. A most delightful lunch was served by our host.

On Monday evening, June 23, the Officers, Council and members of our State Society tendered a dinner to the Officers, Trustees and House of Delegates of the A. M. A. at the Detroit Yacht Club. As guests of honor we had the Ex-Presidents of the A. M. A. who were in attendance.

Our guests were transported to the Club at 5:00 P. M. On arrival they were escorted to boats and given a ride around the island and a view of Detroit's waterfront. Promptly at seven they were seated in the Club's beautiful dining room where a well balanced menu was served. At 8:30 President Brook introduced Dr. C. G. Jennings as toastmaster. Dr. Jennings was in a happy mood and pleasingly introduced the Ex-Presidents, who were called upon to relate the incident in their lives that exerted the greatest influence. It was a most delightful treat to listen to these distinguished men, all of whom have made epochal contributions to American medicine. Our reporter's notes of the incidents related will be published in a subsequent issue. Our guests were returned to their hotels at 11:30 P. M., and many were the expressions of a delightful evening.

The General Session, the President's Reception, the entertainment for the ladies were functions that must have created favorable impressions.

The House of Delegates transacted a large volume of business. Its proceedings will be published in the Journal of the A. M. A. and be reported upon by our delegates at the September meeting.

The Officers elected were: President-Elect, E. Starr Judd, Rochester, Minnesota; Vice-President, L. J. Hirschman, Detroit; Speaker, F. C. Warnshuis, Grand Rapids; Secretary, Olin West, Chicago; Treasurer, Austin Hayden, Chicago. Philadelphia was selected as the place for the 1931 session.

F. C. W.

MICHIGAN STATE BOARD OF REGISTRATION IN MEDICINE

Semi-Annual Meeting Held at Ann Arbor, Michigan, at 6:30 P. M., June 11, 1930

Present: Drs. McLaughlin, Kelly, Marshall, Brook, Lemire, McIntyre, Tew, Teifer, English, Yeomans.

Absent: None.

The meeting was called to order by the President; Dr. Nelson McLaughlin, President, in the Chair.

The minutes of the last meeting were read by the Secretary. No objection being raised, the Chairman declared the minutes of October 9, 1929, and January 6, 1930, adopted as read.

SECRETARY'S REPORT

Gentlemen:

Immediately after being honored by being elected as Secretary of your Board, I assumed the secretarial duties and responsibilities. In this report I shall endeavor to impart a general summarization of my executive activities:

1. OFFICES: The lease on the offices in the Stroh Building expired on November 1, 1929. More suitable offices were found in the Maccabee Building. By authority of the President and the State Administrative Board, the Board's offices were moved to the Maccabee building on December 1, 1929. The rental is the same as was paid in the Stroh Building.

2. NEW LICENSE CERTIFICATES: In accordance with the action of the Board, a new license form was devised. The form was approved by the Attorney General and the Board at its special meeting in January.

3. RULING BY ATTORNEY GENERAL: Several interviews have been had with the Attorney General and he has been communicated with frequently in regard to legal authority and scope of the Board's activities. These opinions have been forwarded to members for their information. Personally, your Secretary is not in accord with the ruling made on Section 3, Subdivision 6th. I purpose to press further for an amended opinion that will permit the Board to exercise suspension power.

4. STATE CONSTABULARY: Interviews and correspondence have been had with the Commanding Officer of the State Constabulary. Three cases were referred for investigation, with the result that two violators have left the state and one is waiting trial.

Through the influence of Dr. McIntyre, each member of the Board has been appointed a Special Police Officer.

5. COMPLAINTS: Complaints were received and action taken as indicated in the following cases:

(1) Dr. _____. Citizens complained of habitual drunkenness. Cited to appear before a Special Committee of the Board and placed on probation. Final disposition to be made at the June meeting.

(2) Dr. Joseph H. Hanson, Detroit. Citizens complained of violations of Section 3, Subdivision 6th. Cited to appear before President and Secretary and license suspended temporarily. Authority to suspend temporarily questioned and Hanson has continued his practice. Several witnesses have filed additional complaints, including the Veterans of Foreign Wars.

(3) Dr. Alex H. Pearson, Ann Arbor. Complaint of illegal association made by the Washtenaw County Medical Society. Cited to appear at June meeting.

(4) Dr. _____. Petition and complaint signed by citizens charging habitual drunkenness. Placed on probation and cited to appear at June meeting.

(5) Dr. Bion Whelan, Hillsdale. Convicted in U. S. District Court, Detroit, on narcotic charges. Sentence suspended on condition that he would cease practice. License temporarily suspended and cited to appear at June meeting.

(6) Dr. _____. Convicted in Circuit Court, on a bribery charge. License suspended and later, on request of Governor Green, the suspension was withdrawn. Cited to appear at June meeting.

(7) Dr. _____. Convicted in U. S. Court and sentenced to Leavenworth, on a narcotic charge. Suspended and cited for June meeting.

(8) Dr. _____. Has large sign "Public Health Clinic" which is misleading to the public. Is associated with an osteopath and chiropractor. Complaint by Wayne County Medical Society. He appeared before the Secretary and agreed to remove the sign. The matter will be referred to the Board at the next meeting for further action.

(9) Dr. _____. Cited for circularizing cards with grossly improbable statements. He has agreed to discontinue the use of these advertising cards.

(10) Dr. _____. Complaint made that he is promising to cure cancer with a paste. He was cited to appear before the Secretary and agreed to withdraw his claims.

(11) Mrs. _____. A midwife, licensed by the Detroit Board of Health. It was charged that she was practicing medicine without a license but upon investigation the charges were found to be untrue.

(12) _____. A registered optometrist, charged with practicing medicine. He was cited to appear before the Secretary, interviewed, and promised to discontinue medical practice.

(13) Narcotic convictions: Five copies of certificates of convictions have been secured from the Federal Court for Board action in June.

(14) B. C. Smith, Detroit. A registered drugless practitioner. Uses a radio machine for treating disease. He was interviewed and promised to discontinue the use of the machine if it was proven valueless.

(15) Dr. _____. A registered osteopath. Served an internship in a Lansing hospital and practiced as a medical man for a short period. Upon investigation he left the state. A classmate of his also served an internship, as above, and practiced at Pigeon as a medical man until an investigation discontinued his medical work.

6. ADMINISTRATION REGULATIONS: The minutes of the Board for the past fifteen years have been reviewed. A compilation of regulations has been made and is submitted for approval.

7. INTERN CURRICULUM: A schedule of required intern work has been formulated and is submitted for approval.

8. WAYNE COUNTY: Numerous interviews have been had with committees and officers of the Wayne County Medical Society, Commissioner of Health, County Prosecutor and Police Commissioner, relative to violations and illegal practice. As a result I am able to report a working plan of concerted action on the part of the Police, Prosecutor, County Society and Major Roehl, of the Detroit Department of Health. Under this plan, several arrests have been made.

9. EXAMINATIONS: I believe the Board will find, as a result of correspondence with the two medical schools, that more satisfactory arrangements have been made for the examinations. A new set of examination rules has been compiled.

10. DETROIT OFFICE: Your Secretary has spent at least one day per week in the Detroit office. During these visits many interviews were had with individuals regarding Michigan licensure.

11. SPECIAL EXAMINATIONS: By direction of the Board, a special examination was conducted in January and four applicants were examined.

12. FEDERATION OF STATE MEDICAL BOARDS: Your Secretary attended the Annual Conference in Chicago, during February, of the Federation of State Medical Boards of the United States.

By motion, the Secretary's report was accepted as read.

Re: *Intern Curriculum*.

By Dr. McLaughlin, seconded by Dr. Teifer:

RESOLVED, that the Curriculum of Intern Work, as submitted by the Secretary, be adopted as a standard by this Board.

Yeas, 10; nays, 0. Motion carried.

TO: Superintendent and Chief of Staff
of hospitals approved for internship by the Michigan State Board of Registration in Medicine.

CURRICULUM OF INTERN WORK (effective July 1, 1930):
I. By action of this Board, on and after July 1, 1930, the requirements set forth in Section III of this regulation will become effective.

II. This Board will require that each candidate for a Michigan license must present a certified statement from an approved hospital that he has satisfactorily completed this curriculum of work during his twelve months of service as an intern.

III. Each approved hospital shall provide for and require of each intern during his twelve months of residency, the following work:

(A) MEDICINE.....Six months
1. General2 months
2. Pediatrics2 months
3. Bacteriological and pathological laboratory.....1 month
4. Out-patient clinic.....2 months
5. X-ray department.....1 month
Comment on work in this division:.....

(B) SURGERY.....Six months
1. Emergency accidents.....4 weeks
2. Eye, ear, nose and throat.....4 weeks
3. Obstetrics:
(Deliveries—8)
(Present at—25 deliveries)
4. General surgery.....8 weeks
5. Anesthetics1 month
Comment on work in this division:.....

NOTE: Subdivisions of each major division (A and B) may be served jointly.

(C) Each intern shall during the year report at a general staff meeting on either
(a) a study of any group of hospital cases, or
(b) a report of research work done in the hospital.

(D) Rating on history writing:.....
75 to 100%

(E) Personal rating:.....
(A-B-C-D)

Personality
Character
Temperament
Deportment
Executive ability

When an intern has completed his hospital year, the Superintendent and the Chief of Staff shall certify in writing to this Board that he has conformed to the foregoing schedule. The certification shall consist of the itemization imparted in Section III.

By action of the Board.

NELSON McLAUGHLIN, M.D., President
F. C. WARNSHUIS, M.D., Secretary.

Re: *Approved Hospitals*.

By Dr. Tew, seconded by Dr. Kelly:

RESOLVED, that the matter of approved hospitals be referred to a Committee on Inspection of hospitals to be appointed by the President.

Yeas, 10; nays, 0. Motion carried.

Re: *Legislation*.

By Dr. Kelly, seconded by Dr. Lemire:

RESOLVED, that the President appoint a committee to confer with the Attorney General on pending legislation, and to report at the October meeting of the Board.

Yeas, 10; nays, 0. Motion carried.

Re: *Administration Rules*.

By Dr. McLaughlin, seconded by Dr. Lemire:

RESOLVED, that the Administration Rules, as submitted by the Secretary, be adopted as a standard by this Board.

Yeas, 10; nays, 0. Motion carried.

ADMINISTRATION RULES (Revised 1930)

1. Applicants for a Michigan license must fulfill the following requirements:

- (a) Graduate of high school and at least two years of college grade work in specified subjects.
- (b) Graduate of Class "A" medical school.
- (c) Pass the written examination of the Board.
- (d) One year of rotating internship in an approved hospital.
- (e) Conform to provisions of Act 237, as amended.

2. Written examinations will be conducted by the Board in June at ANN ARBOR and Detroit; in October at Lansing. Dates to be determined yearly by the Board.

3. Applicants for a Michigan license by indorsement of qualifications or license issued by another state:

- (a) Submission of qualifications upon the application blanks of this Board.
- (b) Must have practiced at least one year in the state whose license is submitted for indorsement.
- (c) Meet the Board's educational requirements.
- (d) Conform to provisions of Act 237 as amended.

4. Applicants for a Michigan license by indorsement fully complying with the Board's requirements will be issued a license by the Secretary at any time during the year.

5. Applicants whose qualifications are deficient shall not receive a license until their individual case is reviewed by the Committee on Registration and Standards and their report acted upon at a session of the Board.

6. Special examination shall not be given unless authorized by a vote of the members, either at a meeting of the Board, or upon direction of the President that a mail vote may be taken authorizing a special examination.

7. The following schedule of fees is established:

EXAMINATIONS: Ann Arbor and Lansing...\$25.00

Detroit.....	\$35.00
{Primary \$10.00	
{Final 15.00	

INDORSEMENT FEE (reciprocity).....	\$50.00
Registration Certificates.....	5.00
Certifications.....	5.00

8. Hospitals accepting unlicensed "chief residents" shall be suspended from the Board's approved list of hospitals.
9. In urgent or grave instances of violations by a physician, the President of the Board may appoint a Special Committee of Board members to conduct a hearing and take such action as the facts warrant,—this action to be reported at the next Board meeting, for final approval and confirmation. Thirty days before the date of the Board meeting a proper notice shall be served, where charges have been filed, citing the physician to appear before the Board and shall show cause why his license should not be revoked or suspended.
10. The President may designate one or more members to investigate medical colleges and hospitals. Upon action of the Board, hospitals not listed as approved by the American Medical Association may be approved for intern training.
11. The following standing committees are created:
 - (1) Schools, Hospitals and Standards.
 - (2) Examination and Qualifications.
 - (3) Legislative.
 - (4) Finance.
12. The President shall designate the subjects assigned to each Board member when examinations are conducted.
13. The Board's "Curriculum of Intern Service" shall govern all intern services. A satisfactory certificate from the hospital, covering the internship, must be submitted before a license can be issued.
14. The Board's "Rules Governing Written Examination" shall be observed whenever examinations are conducted.
15. Graduates of accredited foreign medical schools, in addition to the usual requirements, must submit diplomas certified to by the Consul or member of the U. S. diplomatic corps; must pursue one year of study in an accredited American medical school; and must serve one year of rotary internship in an approved American hospital.
16. Individuals cited to appear before the Board for hearing or trial shall be accorded reasonable opportunity to present facts and evidence to refute the charges. Evidence as to character shall be in the form of affidavits and not by the testimony of individuals.
17. Insofar as they apply, these rules shall govern the issuance and continuance of licenses of drugless practitioners issued by this Board.

Re: *Comprehensive Examinations.*

By Dr. Tew, seconded by Dr. Kelly:

RESOLVED, that the Secretary be instructed to communicate with the Executive Committee of the Faculty, Medical School, Ann Arbor, regarding the Comprehensive Examination now in vogue and to impart to them the objections of the Board and requesting that action be taken to correct the present situation.

Yeas, 10; nays, 0. Motion carried.

REPORT OF THE REGISTRATION AND STANDARD COMMITTEE

Dr. J. D. Brook, Chairman

Dr. Frank A. Kelly

Dr. W. H. Marshall

Dr. W. Ellwood Tew

Dr. T. G. Yeomans.

Re: *Dr. J. M. Blackman, Quincy, Michigan.*

Graduate, Grand Rapids Medical College, 1898.

Licensed in Michigan, January 26, 1900, upon credentials. Practiced in Quincy since that time.

Dr. Blackman was served with a notice to appear before the Board, due to a conviction upon a Narcotic charge, in the U. S. District Court, Detroit, on March 10, 1930, to which he pleaded guilty and paid a fine of \$2,500.00.

Dr. Blackman being ill, he was represented by his attorney, Mr. Glenn C. Cowell, who asked that the Board review the facts in the case impartially and permit Dr. Blackman to retain his license to practice medicine in this state. He presented a petition, directed to this Board, with some three names attached, citizens of Quincy and locality, requesting that Dr. Blackman be permitted to practice medicine in their midst.

The Committee recommends that Dr. Blackman's request be granted.

After a discussion in open meeting, the following vote was recorded:

By: Dr. Brook, seconded by Dr. Tiefer:

RESOLVED, that the license of Dr. Blackman be not revoked.

Yeas, 10; nays, 0. Motion carried.

Re: *Dr. Malcolm E. House, Holland, Michigan.*

Age, 53. Graduate of Syracuse University, 1905. Licensed in New York June 23, 1905, through Board examination. Practiced in Hornell, N. Y., from 1905 to 1930.

The A. M. A. states: "We have nothing on file reflecting against the moral or professional character of Dr. M. E. House and our records indicate there is no reason why he should be refused a license to practice medicine and surgery."

Messrs. Bregoff and Bregoff, Staten Island, N. Y., filed a complaint based upon financial difficulties in connection with a previous marriage. Mr. Howard D. House, Attorney, 1704 Dime Bank Building, Detroit, filed an affidavit challenging the truth of the charges filed against his brother, Dr. House. Dr. House is now located in Holland, Michigan, and asks an indorsement of his New York license.

The Committee recommends that his request be granted. By Dr. Brooks, seconded by Dr. English:

RESOLVED, that the report of the Committee be adopted.

Yeas, 10; nays, 0. Motion adopted.

Re: *Dr. _____, Michigan.*

Dr. _____ was cited to appear before the Board due to charges of Habitual Intoxication made by citizens. He was placed on probation, May 5, 1930, until the June meeting.

The Committee recommends that Dr. _____ be continued on probation until the next meeting of the Board.

By Dr. Brooks, seconded by Dr. Tiefer:

RESOLVED, that the report of the Committee be adopted.

Yeas, 10; nays, 0. Motion carried.

Re: *Dr. _____, Michigan.*

Dr. _____ was cited to appear before the Board because of charges of Habitual Intoxication made by citizens. He was placed on probation by a Committee of Board members, November 18, 1929, to continue until the June Board meeting.

The Committee recommends that he be continued on probation until the next meeting of the Board.

By Dr. Brooks, seconded by Dr. McIntyre:

RESOLVED, that the report of the Committee be adopted.

Yeas, 10; nays, 0. Motion carried.

Re: *Dr. _____, Michigan.*

Age, 45. Graduate, Detroit College of Medicine and surgery, 1907. Licensed in Michigan through Board examination, June 27, 1907.

Dr. _____ was served with a notice to appear before the Board due to his conviction in the Circuit Court on December 10, 1929, upon the charge of Bribery.

He appeared personally before the Board, explained his connection with the contracts, and asked leniency by the Board, promising to refrain from political affairs in the future if permitted to continue his practice.

The Committee recommends that his request be granted.

By Dr. Kelly, seconded by Dr. Marshall:

RESOLVED, that Dr. _____ license be not suspended.

Yeas, 10; nays, 0. Motion carried.

Re: *Dr. Joseph H. Hanson, 2903 Cadillac Boulevard, Detroit.*

Graduate of Detroit College of Medicine, 1906. Licensed in Michigan, No. 6198, May 17, 1906, through Board examination.

Complaint filed by Mr. A. Klette, 5893 Hazlett Avenue, Detroit, stating that Dr. Hanson promised to cure his son of dementia praecox for the sum of \$500.00. This amount

to be paid \$250.00 down and the balance at a later date. After 20 months' treatment the boy was unimproved and upon Dr. Hanson's demand for more money, Mr. Klette came to the Board for advice, and filed a sworn statement regarding the facts in the case, which is as follows:

"I, A. Klette, of 5893 Hazlett Avenue, Detroit, Michigan, being duly sworn, deposes and sayeth that I am a resident of the City of Detroit and have been for all of my life; that I am married and have a son by the name of Donald, whose age is twenty-one years. That this son at the age of sixteen years evidenced a mental derangement for which he has been examined and treated by a number of doctors, all of whom have made a diagnosis of dementia praecox. That my son Donald was in the Psychopathic Hospital of the University of Michigan, in Ann Arbor, for five months, in the summer of 1924, and later was confined in the Michigan State Hospital, at Pontiac, Michigan, since which time he has been in a private sanitarium in Detroit, and in all of these institutions the diagnosis was confirmed as dementia praecox.

I further state that in April, 1928, I was induced to see a certain Dr. Joseph H. Hanson, at 2903 Cadillac Avenue, Detroit, and that my son was examined by this Dr. Hanson, after which he told me that he would bring him back to a perfect mental state and that he proposed to do this by the administration of serum and certain liquid medicines, and that he agreed to do this for a total payment of five hundred (\$500.00) dollars,—two hundred fifty dollars to be paid down and the balance in partial payments, at some future date. He also stated that the reason for this seemingly excessive charge was that he obtained the serums from foreign countries, which made their cost almost prohibitive. For this amount of money he assured me that my son would be completely cured. I then placed my son in Dr. Hanson's care, after paying him the sum of two hundred fifty dollars, and Dr. Hanson treated him by the administration of serum and liquid medicines. He assured me that this medicine would drive the pus out of the dead brain, destroy the sympathetic nerves, and so build up the smaller brain, and in this way would cure him. My son went to him twice a week over a period of approximately twenty months and recently Dr. Hanson demanded a new financial arrangement and again stated, in January, 1930, that he would cure my boy. I was further assured by Dr. Hanson that the boy would be quite safe, and that under this advice I took my son home. When he had been there but a short time he had a violent outburst, attacked his mother, and permanently injured her.

(Signed) Anthony Klette.

Subscribed and sworn to before me,
F. C. Warnshuis, Secretary,
this 20th day of January, A. D. 1930."

Another complaint was filed by Mrs. Harry Upell, 14041 Freeland Avenue, stating that she had paid Dr. Hanson \$325.00, with no results. Mrs. E. J. Dwyer, 11617 Indiana Avenue, also filed a complaint against Dr. Hanson's method of practice. Both women stated that Dr. Hanson had told them that "he taught in the University of Michigan Medical School, and that he had many patients in the University Hospital, at Ann Arbor; that (he had office hours on three days a week) on other days he was busy with his patients in the University Hospital, and Harper and Grace Hospitals, Detroit; that the University send him many patients which they are unable to treat.

Another complaint was filed by C. E. Buchanan, 704 E. Jefferson Avenue, Detroit, a disabled army veteran, suffering from sleeping sickness. He stated that Dr. Hanson claimed he would cure him for \$375.00 (with \$175.00 down) and endeavored to obtain this amount from the U. S. Veterans Bureau.

Another complaint was filed by the mother of Mary Saunders, Highland Park (telephone Hemlock 3480-J), stating that she had paid Dr. Hanson \$295.00; that Dr. Hanson treated this young woman for one and one-half years and discharged her as cured of syphilis. The symptoms reappearing, she went to a public clinic, where her tests were found to be positive, with no indication that proper medical treatment had ever been given her. Dr. Hanson promised to return her money but failed to do so. The girl's mother called upon many patients of Dr. Hanson and her investigations seemed to indicate that Dr. Hanson was employing "cappers" to obtain patients for him from various sections of the city and state, although definite proof was lacking. Among the patients she interview was one Mollie Olshansky, 9745 McQuade Avenue, Detroit (Garfield 6591-M), who stated that she had paid Dr. Hanson \$200.00 and treated two years without result. Upon their complaint Dr. Hanson promised to return their money but did not do so until members of her family "beat him up," when he returned \$175.00.

Mary Saunders is now in Columbus, Ohio, and is being treated for syphilis by Dr. Hugh Baldwin, according to her mother's statement.

Other complaints too numerous to mention are on file in the office of the Secretary of the Board; in the Detroit Board of Health offices; and in the office of the Prosecuting Attorney of Wayne County.

A notice was served upon Dr. Hanson, May 23, 1930, by registered mail, requiring him to appear at the Board meeting, June 11, 1930, to show cause why his license should not be revoked.

The provisions of Act 237, P. A. of 1899 as amended, having been complied with and Dr. Hanson having received by registered mail a notice to appear before the Board of Registration in Medicine to show cause why his license should not be revoked, the Board proceeded with an open hearing and after due review of the evidence presented and careful deliberation, took such action as is hereby indicated:

Cited to appear, May 20, 1930, and registered return card dated May 23, 1930.

CHARGES: Several affidavits and statements were presented to the Board from individuals charging and evidencing a violation of Section 6 of Article 3 of Act 237. Accused appeared in person and with his attorney, and was given ample opportunity to present to the Board such statements, evidence and witnesses as to why he was not guilty of the violations as charged.

ACTION: Upon termination of the open hearing, the Board went into executive session. After careful weighing and reviewing the evidence presented, the finding of the Board of Registration in Medicine was that Dr. Hanson had been guilty of grossly unprofessional and dishonest conduct, obtaining fees on the assurance that an incurable disease could be permanently cured, making grossly improbable statements, and violating the various provisions of subsection 6 of Section 3, of the Medical Practice Act.

Thereupon, on motion of Dr. McIntyre, supported by Drs. Brook and Tiefer, that the License No. 6198, issued to Dr. Joseph Henry Hanson, on May 17, 1906, be revoked and that the Secretary notify by registered mail the said Dr. Joseph Henry Hanson, and that said revocation shall become effective at noon on the 14th day of June, A. D., 1930, and that the fact of such revocation shall be so recorded by the Secretary.

Yeas, 10; nays, 0. Motion carried.

Copy of notice sent Dr. Hanson:

TO:

Dr. Joseph Henry Hanson,
2903 Cadillac Blvd.,
Detroit, Michigan.

Sir:

Following your hearing held in Ann Arbor, on June 11th, 1930, the finding of the Board of Registration in Medicine was that you were guilty of violating the provisions of Act 237, Public Acts of 1899, as amended.

Therefore, be now advised, that the Board of Registration in Medicine, in compliance with the provisions of Act 237 as amended, permanently revoked license, or certificate of registration, numbered 6198, and issued to you under date of May 17, 1906.

This revocation is effective at noon of the fourteenth day of June, A. D. 1930.

MICHIGAN STATE BOARD OF REGISTRATION IN MEDICINE.

By: F. C. WARNHUIS, Secretary.

Dated at Detroit, Michigan,
June 13, 1930.

Re: Sidney H. Culver, Mason, Michigan.

Graduate of University of Michigan, 1886. Licensed in Michigan, January 26, 1900, upon the basis of credentials.

Practiced in Mason since that time.

Dr. Culver was notified to appear before the Board due to his conviction in the Circuit Court of Ingham County upon the charge of Abortion, on May 29, 1930.

Mr. Charles Hayden, attorney, appeared for Dr. Culver and stated that an appeal had been taken from the conviction, and asked that the Board delay final action until after this matter had been settled.

By Dr. Kelly, seconded by Dr. Brook:

RESOLVED, that the Board postpone action upon Dr. Culver until the October meeting of the Board.

Yeas, 9; nays, 0. Motion carried.

Re: Dr. James McEwan, 753 David Whitney Building, Detroit, Mich.

Age, 54. Graduate of Detroit College of Medicine, 1907. Licensed in Michigan, August 1, 1907, through Board examination. Practiced in Detroit since that time.

Dr. McEwan was served with a notice to appear before the Board due to his conviction in the U. S. District Court, Detroit, Michigan, on March 20, 1930, upon a Narcotic charge to which he pleaded guilty, and paid a fine of \$1,500.00. Dr. McEwan asks leniency by the Board.

The Committee recommends that this license be not suspended.

By Dr. Lemire, seconded by Dr. Tiefer:

RESOLVED, that the report of the Committee be adopted.

Yeas, 10; nays, 0. Motion carried.

Re: Dr. Neil E. Campbell, Detroit, Michigan, (now at Narcotic Farm, Capac, Michigan).

Age, 44. Graduate of Detroit College of Medicine, 1912. Licensed in Michigan, March 23, 1912, after a Board examination.

Dr. Campbell was served with a notice to appear before the Board for a hearing, due to his conviction upon a Narcotic charge in the U. S. District Court, Detroit, on April 5, 1930. He pleaded guilty, and sentence was deferred for six months, in order that he might receive treat-

Mr. L. A. Koepfgen, Managing Director of the Narcotic Educational Association, 51 W. Warren Avenue, Detroit, requested the privilege of appearing before the Board in Dr. Campbell's behalf, and did appear. He asked that action

on Dr. Campbell be delayed pending further treatment under his direction.

By Dr. Brook, seconded by Dr. Kelly:

RESOLVED, that this matter be laid on the table until the October meeting of the Board.

Re: Dr. E. D. Welsh, 358 Division Street S., Grand Rapids.
Graduate of Michigan College of Physicians and Surgeons, 1905. Licensed in Michigan, May 19, 1905, upon credentials.

Dr. Welsh was served with a notice to appear before the Board due to his conviction in the U. S. District Court, Grand Rapids, March 14, 1930, upon a Narcotic charge, and to which he pleaded guilty. He is now serving his sentence in Leavenworth Penitentiary and asks that the Board delay action on the matter until he shall be able to appear personally and explain the circumstances. A letter has also been received from Mrs. Welsh, asking leniency and stating that she is unable, financially, to appear or obtain an attorney to represent Dr. Welsh.

The Committee recommends that this matter be laid on the table until the next meeting of the Board.

By Dr. Brook, seconded by Dr. Lemire:

RESOLVED, that the recommendation of the Committee be adopted.

Yea, 10; nays, 0. Motion carried.

Re: Dr. Bion Whelan, Hillsdale, Michigan.

Age, 72. Graduate of University of Michigan, Medical School, 1879. Licensed in Michigan upon credentials, Jan. 26, 1900, License No. 4. Practiced in Hillsdale all his life.

Dr. Whelan was served with a notice to appear before the Board, due to his conviction in the U. S. District Court, on April 3, 1930, upon Narcotic charge, to which he pleaded guilty. His sentence of two years in Leavenworth was suspended for five years on the condition that he retire from the practice of medicine and not again prescribe narcotic drugs.

Dr. Welsh did not appear.

The Committee recommends that Dr. Whelan's license be revoked.

By Dr. Brook, seconded by Dr. Lemire:

RESOLVED, that the recommendation of the Committee be adopted.

Re: Dr. Alex H. Pearson, 105 W. Huron Street, Ann Arbor.
Graduate of University of Michigan, Medical School, 1904. Licensed in Michigan upon credentials, June 22, 1904. Practiced in Ann Arbor and vicinity since that time.

The Washtenaw County Medical Society charges him with "association with an unregistered practitioner of medicine" inasmuch as his nephew, Wm. B. Peach, was convicted of practicing medicine without a license, in January, 1929, and had been in Dr. Pearson's office. Due to these charges Dr. Pearson was dropped from membership in the Washtenaw Society, April 25, 1929. The Washtenaw County Medical Society asks that his license to practice medicine be revoked.

The Committee recommends that no action be taken in this matter at this time.

By Dr. Kelly, seconded by Dr. Tiefer:

RESOLVED, that the recommendation of the Committee be adopted.

Yea, 8; nays, 2. Motion carried.

Re: Dr. Alvin T. Bonathan, c/o Hurley Hospital, Flint.

Graduate of University of Michigan, June 17, 1929, after three years of actual enrollment in the medical school, but with previous work taken in the Literary College. He has been registered in the medical school during the past year, as well as serving an internship in Hurley Hospital, Flint.

Asks that a certificate of registration be given him, if he is successful in passing the Board examination which he is writing in June, 1930.

The Committee recommends that Dr. Bonathan's request be granted.

By Dr. Brook, seconded by Dr. McIntyre:

RESOLVED, that the recommendation of the Committee be adopted.

Yea, 10; nays, 0. Motion carried.

Re: Dr. Daniel Van Woerkom, 118 S. East Street, Lebanon, Indiana.

Completed the medical course, University of Michigan, in June, 1928, but his diploma was held up until February, 1929, due to his failure in the Comprehensive Examination. Served one year internship, July 1, 1928, to July 1, 1929, in St. Francis Hospital, Pittsburgh, making him six months short of the required service following graduation. He was advised to remain in a hospital for this additional period, but did not and has been practicing with a physician in Lebanon, Ind. Asks that we accept this assistantship in lieu of the additional intern service required.

The Committee recommends that his request be granted.

By Dr. Brook, seconded by Dr. Marshall:

RESOLVED, that the committee's recommendation be adopted.

Yea, 10; nays, 0. Motion carried.

Re: Dr. G. C. Hall, Ann Arbor, and Dr. Bruce R. Elliott, Lansing.

Completed the medical course in the University of Michigan, June, 1929, but held up due to failure to pass the Comprehensive examinations. Asks that the Board waive the intern requirement following date of conferring of M.D. diploma.

The Committee recommends that this request be not granted.

By Dr. Kelly, seconded by Dr. English:

RESOLVED, that the recommendation of the Committee be adopted, unless the University of Michigan corrects the date of their diplomas.

Yea, 10; nays, 0. Motion carried.

Re: Dr. Trian Leucutia, Harper Hospital, Detroit.

Age, 38. Graduate of University of Budapest, December 23, 1916. Specialized in X-ray work in University of Paris, and University of Cambridge, England, 1919-1921. He has had charge of the X-ray department of Harper Hospital (Drs. Hickey, Evans and Reynolds) for several years. Asks that the Board accept his credentials and permit him to write the Board examination, as a qualification for licensure in this state.

The Committee recommends that his request be granted.

By Dr. Brook, seconded by Dr. Tiefer:

RESOLVED, that the recommendation of the Committee be adopted.

Yea, 10; nays, 0. Motion carried.

Re: Dr. Thomas C. Smith, Battle Creek Sanitarium, Battle Creek, Michigan.

Age, 37. Graduate of Queen's University, Kingston, Ontario, January 31, 1919. Licensed in New York State, June 25, 1925, through Board examination. Recommended by Dr. Stuart Pritchard, of the Battle Creek Sanitarium. Dr. Smith asks an indorsement of his New York license.

The Committee recommends that Dr. Smith's request be granted.

By Dr. Brook, seconded by Dr. Tiefer:

RESOLVED, that the recommendation of the Committee be adopted.

Yea, 10; nays, 0. Motion carried.

By Dr. Brook, seconded by Dr. Kelly:

RESOLVED, that the report of the Committee as a whole be adopted.

Yea, 10; nays, 0. Motion carried.

MISCELLANEOUS

Re: Dr. Algol R. Nelson, Grand Rapids, Michigan.

Graduate of Yale University, School of Medicine, 1928. Asks that his residency in Butterworth Hospital, Grand Rapids, Michigan, be accepted as part of the hospital requirement of the Board.

The Committee recommends that Dr. Nelson's request be granted.

By Dr. Brook, seconded by Dr. Marshall:

RESOLVED, that the intern services presented by Dr. Nelson be considered as fulfilling the minimum requirement of the Board.

Yea, 10; nays, 0. Motion carried.

Re: Dr. Walter E. McGillicuddy, Detroit, Michigan.

Dr. McGillicuddy wrote the Board examination at Detroit, in 1926, and was issued License No. 10828, July 17, 1927, through a Board action.

The following letter has been received from the Detroit College of Medicine and Surgery, in this connection:

Jan. 16, 1930.

Michigan State Board of Registration in Medicine, Detroit, Michigan.

Dear Doctor Warnshuis:

My attention has recently been called to the statement that Mr. W. E. McGillicuddy is practicing medicine in the State of Michigan, and that he claims to have completed the routine course in medicine at the Detroit College of Medicine and Surgery, but that he was refused a diploma because of a condition incurred during his first year of registration.

As you are, of course, aware, the Detroit College of Medicine and Surgery does not concern itself with the rulings of the State Board of Registration in Medicine and is entirely satisfied with them whatever they may be. We therefore, feel that Mr. McGillicuddy's medical licensure does not concern us. We are concerned, however, with the statement which seems to have been pretty well disseminated that he completed the medical course offered in the Detroit College of Medicine and Surgery and that he received unfair treatment in the institution.

Herewith, I enclose a copy of a letter written in 1920 to Dr. B. D. Harison, then Secretary of the State Board of Registration, giving a full statement concerning Mr. McGillicuddy's case. As you will note from this letter and the accompanying statement, Mr. McGillicuddy was never a fourth year student in this school and never succeeded in completing the work of a single year of his registration.

If any criticism was due the college in the McGillicuddy case it was for having been unduly lax and lenient in handling the matter. The only comfort that I can find in the affair is that all this took place prior to my connection with the school and that most of it occurred before the

discontinuance of the old Detroit College of Medicine and the establishment of the Detroit College of Medicine and Surgery with standards conforming to the requirements of the American Medical Association.

I trust that you will realize that this letter is merely for your information, and that we neither bear any ill will toward Mr. McGillicuddy nor do we desire to interfere with his activities so long as we are acquitted of responsibility for the same.

With kindest personal regards, I remain,

Yours sincerely,
DETROIT COLLEGE OF MEDICINE
AND SURGERY.

(Signed) W. H. MacCRACKEN, Dean.

By Dr. Kelly, seconded by Dr. Brook:

RESOLVED, that Dr. McGillicuddy be required to appear before the October Board meeting to explain the charges preferred against him.

Yeas, 10; nays, 0. Motion carried.

Re: Dr. W. Ellwood Tew, Bessemer, Michigan.

Dr. Wm. F. English, Saginaw, Michigan.

Drs. Tew and English request the privilege of a special written Board examination, as an additional licensure qualification in this state.

By Dr. Tiefer, seconded by Dr. Kelly:

RESOLVED, that the requests be granted and that the President be instructed to appoint a Committee to conduct the examinations.

Yeas, 10; nays, 0. Motion carried.

The President appointed Drs. Kelly and McLaughlin as a Special Examining Committee.

Re: Traveling Expenses.

Dr. McIntyre reported several conferences with the State Administrative Board in connection with a new arrangement covering the traveling expenses of the Board members, but that nothing definite had been arrived at, as yet.

By Dr. McIntyre, seconded by Dr. Kelly:

RESOLVED, that the traveling expense vouchers of the Board members be held up until after the Detroit meeting.

Yeas, 10; nays, 0. Motion carried.

Upon motion the meeting adjourned.

NELSON McLAUGHLIN, President.
F. C. WARNHUIS, Secretary.

PITUITARY GLAND HAS ROLE IN HARDENING OF ARTERIES

The probable role played by the pituitary gland in the development of arteriosclerosis, more familiarly known as hardening of the arteries, was discussed by Dr. Robert C. Moehlig, of Detroit, at the meeting of the Association for the Study of Internal Secretions. The effect of feeding animals on high fat diets, on normal diets with injections of the posterior lobe of the pituitary gland, and on high fat diets with the pituitary injections were reported. Control animals were fed on normal diets alone and compared with the other groups. Four of the five animals fed on the high fat diet alone showed gross arteriosclerotic changes of the aorta, the main blood vessel from which the arteries of the body proceed. Those fed on the high fat diet plus the pituitary extract showed the most intense lesions of all. Eight of the ten animals showed marked arteriosclerotic changes and microscopic examinations disclosed changes of the type seen in human hardening of the arteries. The injection of the pituitary extract alone, without any dietary influence, produced overdevelopment of the cortex of the adrenal glands. Dr. Moehlig called this an important link in the chain of arteriosclerosis.

At the same meeting, Dr. W. Raab, of Prague and Vienna, described experiments of his which showed the role played by the pituitary gland in regulation of the body's fat. Dr. Raab concluded that injection of pituitary extract favors the absorption of fat by the liver. Assuming that a certain amount of fat is normally destroyed in the liver, it is evident that if the pituitary is disturbed in its coöperative activity with the brain and nervous system, these fat amounts will not be destroyed. They will be stored in the tissues and consequently lead to obesity, Dr. Raab said.—Science Service.

COUNTY SOCIETIES

GRATIOT-ISABELLA-CLARE COUNTY

The May meeting of the Gratiot-Isabella-Clare County Medical Society was held in the Wright House, Alma, Thursday, May 15. Dinner was served to 18 members and three visitors. President Budge called the meeting to order. The question of the June meeting, relating to County Health Units, was discussed because of the recent death of Doctor Guy L. Kiefer. By motion it was voted to hold this meeting as planned.

By motion it was voted to not hold meetings in July or August and to plan to have motion pictures for the September meeting.

President Budge then introduced Dr. Rockwell M. Kempton and Dr. Oliver W. Lohr from Saginaw. The former took up Meningitis from the clinical side, relating the experience in the Saginaw epidemic of the past two years in which they had a mortality of 60 per cent in those under one year old and a general mortality of 28 per cent. If they survived the first week they usually recovered.

Intraspinal serum treatment early was the most satisfactory. In the majority of cases four days' treatment was sufficient.

Dr. Lohr took up the subject from the Laboratory side, describing the method of growing cultures, stating that in some early cases no germs would be found in the spinal fluid. The blood count was not a reliable guide for treatment or prognosis. The prognosis was thought to be more favorable if there were more germs intracellular than in the serum. In this epidemic about 14 per cent were carriers, when no epidemic is present about 5 per cent of the population are carriers. Some cases of sudden death at the time of the epidemic were proved by post-mortem not to be epidemic meningitis. Many more interesting and practical points were brought out in the discussion.

Dr. Kempton and Dr. Lohr were given a rising vote of thanks for this very practical presentation. Meeting adjourned.

The June meeting of the Gratiot-Isabella-Clare County Medical Society was held in the Wright House, Alma, Thursday, June 12. Ten members and five visitors were present for the 6:30 dinner and five members came in after dinner.

President Budge called the meeting to order, stating the purpose of the meeting, and introducing Dr. W. H. Pickett from the State Board of Health as the first speaker. Dr. Pickett went into details as to the object of the County Health Unit, stating there were 468 full time County Units in the United States, 40 in Ohio and five in Michigan already working and three more counties expecting to start this fall.

Following Dr. Pickett, President Budge introduced Dr. Donald E. Camp, full time Health Officer of Midland County, who explained how the Unit has worked so far in Midland County, having only started there January 1, 1930.

President Budge then introduced Dr. O. L. Ricker, who explained how the full time unit has worked in Wexford County for the past two years. Dr. Ricker explained how a committee of three members of the Wexford County Society is appointed to adjust differences between the Health Officer and members.

President Budge then said the meeting was open for discussion. Many asked questions of the speak-

ers; after these were answered, Dr. W. E. Barstow introduced the following motion: "That this Society approves the formation of a County Health Unit," seconded by Doctor T. J. Carney. After considerable discussion this motion was carried.

In the discussion which followed the passing of this motion, it was suggested that, inasmuch as this was a single County Unit, the Secretary secure the vote of the Gratiot County members to this motion.

After the visiting speakers were thanked for their kindness in coming and presenting this subject to the members the meeting was adjourned.

E. M. HIGHFIELD, M.D., *Secretary.*

OAKLAND COUNTY

The monthly meeting of the Oakland County Medical Society was held on June 19, 1930, at the Northwood Inn, Royal Oak. Following dinner the society adjourned to the rooms of the Royal Oak Division of the Oakland County Department of Health for the formal meeting.

As the minutes of the previous meeting had been published in the "Bulletin," they were not read.

A letter from Mrs. Josephine Kiefer was read, in which she expressed the thanks of herself and family for the kind letter of sympathy and the beautiful tribute paid the memory of her husband, Dr. Guy L. Kiefer, by the Oakland County Medical Society.

The Secretary read the following applications for membership:

Dr. O. L. Quillen.....Pontiac
Dr. C. E. Jeffery.....Ferndale

The scientific program was given over to a discussion of the progress in medical roentgenology.

The subject was introduced by Dr. Hans A. Jarre, Detroit, who stated that the science of roentgenology had been advancing rapidly in recent years and that its limits had not been reached. The roentgenologic laboratory was becoming the clearing house for many obscure conditions, and to secure the most satisfactory results requires full co-operation between the roentgenologist and the private practitioner.

He related the history of the development of intravenous pyelography, telling of the work begun at Professor Lichwitz's laboratory in Hamburg; the continuance of the study at Professor von Lichtenberg's clinic at Berlin; the synthesizing of over 700 compounds by the chemist, Professor Arthur Binz of Berlin, which resulted in the discovery of an organically bound iodine compound, suitable for intravenous injection, being non-toxic, soluble in water and neutral in reaction, the drug now being known as uroselectan.

Much of the early work on animals was done at Dr. Lichwitz's clinic. The clinical application of this new compound was successfully carried out by Dr. Swick of New York at the von Lichtenberg clinic in Berlin, and continued later in this country.

The intravenous method is particularly applicable when retrograde pyelography is indicated and when the latter method, for mechanical or infectious reasons, becomes impossible or dangerous.

With uroselectan we have a new method of examining the kidney, ureters, and bladder, anatomically, functionally, dynamically and physiologically.

Dr. Lynn Hershey, Detroit, in his discussion of roentgenologic advance in neurology, stated that medicine was becoming more of a science and less of an art, though medicine is not a pure science, as the human being is not made after an exact pattern.

He stated that the use of the roentgenogram had become indispensable in neurology and described the procedures followed in encephalography and ventriculography. He gave a lantern demonstration

showing cases with brain tumor and other abnormal conditions.

In a discussion of the treatment of cerebral injury cases produced by trauma, he stated that the patient dies from hemorrhage and increased intracranial pressure, that they do not die from the fracture unless it is a depressed fracture.

Dr. W. A. Wilson, Detroit, discussed recent roentgenologic studies on intra-thoracic organs. He told of certain characteristic diagnostic points that had been brought out by these studies. Roentgenograms were presented showing abnormal conditions of the esophagus, mediastinum and bronchi, as well as some showing the lodgment of various foreign bodies, that were later successfully removed.

New conceptions of the physiology of the bronchial tree were demonstrated, illustrated by moving pictures, which showed the changes in the size and shape of the air passages during respiration.

Guests of the society were Dr. Selaheddin Bedri, Health Officer, Minister of Health, Angora, Turkey, and Dr. Tahsin Sevket, epidemiologist in the Hospital Numune, Angora, Turkey. They have attended the school of public health at Johns Hopkins University during the past year and have come here from Lansing, where they spent several weeks at the Michigan Department of Health, studying with the Training School for Health Officers. They are spending several days in this vicinity observing the methods of the Pontiac and the Oakland County departments of health.

It was moved by Dr. Larson that the Society extend a vote of thanks to Dr. Jarre, Dr. Hershey, and Dr. Hudson for the very instructive and fascinating program they had presented. Supported. Carried.

There being no further business, the meeting adjourned.

C. A. NEAFIE, M.D.,
Secretary.

JACKSON COUNTY

The May Meeting of the Jackson County Medical Society was held at the Hayes Hotel Tuesday evening, May 20, 1930. Dinner was served at six-thirty, following which President Cooley called the meeting to order.

The minutes of the previous meeting were approved as published in the Bulletin. The chairman of the Legislative Committee, Dr. Geo. R. Pray, was called upon for a report. The committee, which is composed of Drs. Pray, Hungerford and Meads, all attended the meeting held in Ann Arbor on May 16, 1930. Dr. Pray gave a résumé of the meeting in Ann Arbor, which was supplemented by remarks from Drs. Hungerford and Meads. It was brought out that during the coming session a policy of defense would be followed. Also that a change in the system of registration to one similar to the system in vogue in the state of New York, would some day be brought about. This was a splendid report from a very active committee.

The committee on Preventive Medicine was called upon for a report. Dr. Clark, chairman, had no report to render.

Dr. Brown, chairman of the committee on the nursing situation at the contagious hospital, was called upon for a report. The committee thought that the request of the District Nurses Association was premature and advised that action of any sort on this request be put over for several months.

Dr. Porter, chairman for June, asks for suggestions as to what type of meeting should be held, and whether or not any meeting at all should take place, inasmuch as the A. M. A. meeting is being held at Detroit during the fourth week of June. A motion by O'Meara-Munro that a June picnic be held was passed.

The Society stood in silence for two minutes in memory of the late Dr. C. E. Stewart and Dr. Guy L. Kiefer. A committee of Drs. Peterson, McLaughlin and Alter were appointed to draw up resolutions on the death of these two men, which shall be spread on the minutes of the society.

President Cooley then turned the meeting over to Dr. George Pray, chairman for the day. Dr. Pray introduced as speaker of the evening Dr. I. Harrison Tumpeer of Chicago, Ill. Dr. Tumpeer gave a very interesting talk on the problems of infant feeding, a synopsis of which will appear in a later issue. Following considerable discussion the meeting adjourned.

Attendance forty-four.

WOMAN'S AUXILIARY, MICHIGAN STATE MEDICAL SOCIETY

MRS. L. J. HARRIS, President, Jackson, Mich.
MRS. J. EARL MCINTYRE, Secretary, Lansing, Mich.

BENTON HARBOR SESSION

Now that the National Auxiliary Convention has been brought to a successful close in Detroit, let us turn our thoughts and plans to the State Convention which occurs in Benton Harbor, September 15-16-17.

Having been inspired by reports from other states as to their activities regarding State Health, Civic Health, County programs, Hygeia circulation and so on, we feel that we have a great deal to do at this meeting, so we want to have the attendance larger than ever.

When we see that Michigan in 1928 had a membership of 262 and in 1930, 648, we feel that it has grown very well indeed, but we know that there are so many counties unorganized and so many who are eligible who are not members, that we must not be too complacent.

Mrs. Kiefer, who is organization chairman, has left for Europe—she had planned this summer to organize societies in the northern part of the state, as she expected to be there at this time. We regret that she has been unable to do so, but before going away she has added Oakland county to our list, which we welcome cordially, and Washenaw county is under way.

Especially do we want Auxiliary members to make a supreme effort to come to Benton Harbor, which is accessible from up and down the State. They are planning many pleasant entertainments for us and anticipating our coming. We will also welcome all wives of physicians, with whom we hope to become better acquainted. The program for our convention will be found in the September issue of the Journal.

(Mrs. L. J.) MABEL HOUGHTON HARRIS.

GENERAL NEWS AND ANNOUNCEMENTS

Dr. Charles Dutchess of Detroit was operated upon for appendicitis on June 30th.

Dr. James Matthews of Detroit has returned from a three months sojourn in California.

Dr. and Mrs. J. H. Sanderson, West Warren Avenue, Detroit, left for Europe on July 1st.

Dr. and Mrs. Max Ballin of Detroit are spending the summer in Germany visiting relatives in Berlin.

Be sure to send in your hotel reservations for the Annual Meeting. See this issue for program and announcements.

Drs. H. J. Van den Burg, T. D. G. Gordon and E. W. Schnoor of Grand Rapids spent the month of July on the Pacific coast.

Dr. J. M. Robb assumed the duties of president of the Wayne County Medical Society on July 1. Dr. H. W. Plaggemeyer is president-elect of the same organization.

Dr. W. R. Chittick of San Diego, California, who had practiced for over forty years in Detroit, was one of the guests at the Annual Convention of the American Medical Association.

Dr. L. J. Hirschman of Detroit, Past-President of the Michigan State Medical Society, was elected Vice President of the American Medical Association at the Detroit meeting.

Dr. F. C. Warnshuis has been re-elected Speaker of the House of Delegates of the American Medical Association. This is the twelfth year of Dr. Warnshuis' occupancy of this office.

Mr. W. J. Burns, executive secretary of the Wayne County Medical Society, participated in a symposium on Organizational Work at the Minnesota State Medical Society Annual Meeting held in Duluth in July.

At the annual meeting of the Detroit Academy of Surgery the following officers were elected for the ensuing year: President, Dr. H. W. Hewitt; Vice President, Dr. Ira Downer; Secretary and Treasurer, Dr. Roger Walker.

Dr. Frank L. Reynolds has been appointed Superintendent of the Grand View Hospital, Ironwood, succeeding Dr. Walter Reineking, who resigned to accept the superintendency of the Madison, Wisconsin, County Sanitarium.

Dr. P. M. Hickey, professor of roentgenology of the University of Michigan, and Dr. Alexander Blaine of the Jefferson Clinic of Detroit received honorary degrees at the annual commencement of the Detroit City College held on the 19th of June. Dr. Hickey received the honorary degree of D.Sc. and Dr. Blaine M.S. degree.

Mr. Robert Oakman of Detroit entertained the trustees and officers and several other guests on his yacht on Lake St. Clair and the St. Clair River on the 22nd of June. The trustees of the American

Medical Association held their annual meeting on the boat and everyone reported a very pleasant voyage over the waters amid the cool breezes of Lake St. Clair.

The registration of doctors at the annual meeting in Detroit of the American Medical Association numbered 5,300. It has been estimated that for every doctor registering as a Fellow of the American Medical Association there was one guest, consisting of doctor or exhibitor or doctor's wife, which would mean that the number attending the convention was considerably over 10,000.

Marquette will be the location of the children's clinic to be operated under the Couzens Fund. This will necessitate the erection of a building which will cost approximately \$75,000 with an appropriation of maintenance of about \$50,000. The building will be connected with St. Luke's Hospital at Marquette. The staff of the clinic will be selected by the Department of Post Graduate Medicine of the University of Michigan.

Dr. German, of Grand Rapids, is again arranging for an interesting Scientific Exhibit. He solicits contributions.

A varied Commercial Exhibit is being provided for in Sommer Hall. Hold your orders and place them with these exhibitors.

Delegates are urged to be present by 9:00 A. M., Monday, September 15, to present their credentials. The House of Delegates will have a large agenda of business to transact.

On June 6, the Saginaw Valley specialists in diseases of the eye, ear, nose, and throat, organized the Saginaw Valley Academy of Ophthalmology and Otolaryngology at the Hotel Bancroft. The society will hold monthly meetings. The following officers were elected: President, Dr. Fred J. Cady, Saginaw; vice president, Dr. P. R. Urmston, Bay City; secretary-treasurer, Dr. Walter K. Slack, Saginaw.

Dr. Charles Baker of Bay City addressed the society on the subject of "Deafness."

The annual dinner of the Alumni of the Detroit College of Medicine held on the evening of June 25th at the Statler Hotel consisted of the largest gathering of the Alumni that was ever gotten together. The large ballroom of the Statler Hotel was crowded to capacity. The program of the evening was supplied by Dr. James Inches, who presented some marvelous moving picture films illustrating his African adventures. Dr. Inches is a popular lecturer who never fails to delight his audiences.

The Oakland County Medical Society had as speakers at their last meeting on May 15th, Dr. C. J. Lyons, professor of oral surgery in the dental school and the medical school of the University of Michigan, and also Dr. J. G. R. Manwaring of Flint. The subject of the evening was Focal Infections. Dr. Lyons prefaced his address by recounting the history of the dental profession in Michigan. He discussed the subject of focal infection from the dental viewpoint. Dr. Manwaring advocated the thorough examination of patients in the way of determining the particular foci which constituted the cause of the disease.

The Board of Regents of the University of Michigan have appointed an executive committee to govern the medical school. This act will divide the administration of the medical school among several department heads. Dr. F. G. Novy will be at the

head of the bacteriology department and will head the division of pre-clinical medicine. Dr. James D. Bruce will be director of postgraduate activities in medicine. Clinical medicine will be under the direction of Dr. Udo J. Wile; the University Hospital will be under the direction of Dr. Harley A. Haynes. Dr. Arthur A. Curtis, who was formerly assistant to the Dean of the medical school, has been appointed secretary of the school.

The Upper Peninsular Medical Association will hold its annual meeting at Marquette, Michigan, August 7 and 8. The following physicians and surgeons will supply the program: Dr. F. A. Collier of Ann Arbor will speak upon Post-Operative Pulmonary Complications; Dr. Robert Preble of the Northwestern University, Some Generalizations of Heart Disease; Dr. Russel A. Hibbs, Orthopedic Surgery, and Dr. J. A. Bergen of the Mayo Clinic, Ulcerative Colitis. Dr. B. G. Montgomery of Sault Ste. Marie, Mich., and Dr. William S. Jones of Menominee, Mich., will also appear on the program, subjects not announced at the time of going to press.

The second number of Volume 1 of the Journal of the Detroit College of Medicine and Surgery has reached us. Dr. James E. Davis, professor of pathology, is editor in chief, with Dr. W. S. Reveno and Dr. D. G. Ross as assistants. This number contains the following papers by members of the faculty of the College: Tonic Automatism in the Stomach of the Monkey as the Determining Factor in the Type of its Muscular Response—Comparative Studies VII, by T. L. Patterson; Serum Pigmentation and Kinetics of the Latent Jaundice of Lobar Pneumonia, Norman W. Elton; Aleukemic Leukemia—Case Report, William S. Reveno; Chronic Irritable Colon, L. J. Steiner; A Review of Cardiac Adaptability, Emil Rupprecht; and Classification of Nephropathology, James E. Davis.

The reception to the President of the American Medical Association was followed by a dance in the two ballrooms of the Statler Hotel on the evening of June 26th. This function was given by the Wayne County Medical Society. At the head of the receiving line was Dr. Angus McLean of Detroit, who introduced the guests to the President, Dr. Morgan, and Mrs. Morgan, of Washington, D. C. Following them were Dr. and Mrs. E. Starr Judd, President-elect, of Rochester, Minnesota; Dr. and Mrs. M. L. Harris of Chicago, Ill., Past-President of the Society; Dr. Rollin Stevens and Dr. Mary Stevens of Detroit; Dr. and Mrs. A. S. Brunk of Detroit; Dr. and Mrs. Macotte, Washington, D. C.; Dr. and Mrs. A. B. Conklin of Washington, D. C.; Dr. and Mrs. Jennings of Detroit; Dr. and Mrs. B. R. Shurly of Detroit; and Dr. and Mrs. J. D. Brook of Granville, Mich.

The committee on awards of the scientific exhibit of the American Medical Association awarded certificates of merit, Class 1, to the following physicians of Detroit: Dr. James E. Davis and Dr. Normal W. Elton of the Detroit College of Medicine and Surgery for serum pigmentation studies; Drs. Rollin A. Stevens, Hands A. Jarre and Clyde K. Halsey for roentgenographic and pathologic motor phenomena in various organs by fast serial roentgenography. The gold medal in class 2 was awarded to Drs. F. G. Novey, M. H. Soule and P. B. Hadley of the University of Michigan for excellence of presentation of studies on respiration and dissociation of the micro-organism. Awards in Class 2 are made for exhibits which do

not exemplify purely experimental studies and which are judged on the basis of the excellence of correlating facts and excellence of presentation.

On the evening of June 23 the Michigan State Medical Society entertained the House of Delegates of the American Medical Association at dinner at the Detroit Yacht Club, Belle Isle, Detroit. Between four and seven o'clock the delegates of the American Medical Association and council of the Michigan State Medical Society were entertained by rides around the Island in high speed motor boats. The past-presidents of the American Medical Association since 1900, who with three or four exceptions were present, were seated at the speakers' table. President J. D. Brook of the Michigan State Medical Society in a well worded speech extended the Society's welcome to the guests and introduced Dr. C. G. Jennings of Detroit, who was the toastmaster of the evening. Each of the past-president guests was invited to deliver a brief address on what he considered his greatest experience. The speeches were limited to ten minutes and all proved very entertaining. This social event was thoroughly enjoyed by everyone present. (See page 581 this number of the Journal M. S. M. S.)

The first informal conference of Executive Secretaries of County Medical Societies was held in Detroit, Wednesday, June 25, 1930, on the occasion of the A. M. A. meeting. Luncheon was served on the Roof Garden of the Wayne County Medical Society; golf and swimming were enjoyed at the Lakewood Country Club, Windsor, Canada, followed by dinner and the business meeting. Mr. William J. Burns, Executive Secretary of the Wayne County Medical Society, was chosen as Chairman, and Mr. H. Van Y. Caldwell, Executive Secretary of The Academy of Medicine of Cleveland, was elected Secretary. The conference consisted of the interchange of ideas for the good of the members and the individual County Medical Societies which they represented. The Executive Secretaries present at this initial conference included Mildred E. Jeffrey, Dayton, Ohio; Helen G. Keelor, Cincinnati, Ohio; J. Louis Neff, Mineola, N. Y.; E. H. Bartelsmeyer, St. Louis, Mo.; E. M. Kingery, Des Moines, Iowa; H. C. Gerber, Jr., Toledo, Ohio; Alice C. Stotlar, Seattle, Wash.; Theodore Wiprud, Milwaukee, Wis.; H. Van Y. Caldwell, Cleveland, Ohio; Dr. Alec Thompson, Brooklyn, N. Y., and Wm. J. Burns, Detroit, Mich.

Dr. Wm. H. Robey, President of the American Heart Association, stated that he considered the meeting held in Detroit June 24 the best in the history of the Association. At noon, a luncheon was served in St. Mary's Hospital for the various officers of the Association, those who participated in the program and a few invited guests. Among those present were Drs. J. B. Herrick of Chicago, R. H. Halsey of New York, Alex. Lambert of New York, W. S. Thayer of Baltimore, Emanuel Libman of New York, H. E. B. Pardee of New York, E. P. Carter of Baltimore, J. E. Talley of Philadelphia, Frederick M. Smith of Iowa City, Lewis Conner of New York, U. J. Wile and F. N. Wilson of Ann Arbor, Geo. Herrmann of New Orleans, J. G. Carr and many other leading men in cardiology. There were seventeen papers, many of them illustrated by lantern slides. Probably the most beautifully illustrated was that on "Anatomic Types of Cardiac Syphilis Encountered in Cases of Sudden Death," by Dr. H. S. Martland of Newark, New Jersey. The papers presented covered all phases of cardiovascular syphilis. The unusually good program was arranged by Dr. Pardee of New York.

THE DOCTOR'S LIBRARY

THE SURGICAL CLINICS OF NORTH AMERICA. (Issued serially, one number every other month.) Volume 10, No. 3. (New York Number—June, 1930.) Octavo of 265 pages with 123 illustrations. Per Clinic Year, February, 1930, to December, 1930; Paper, \$12.00; Cloth, \$16.00 net. Philadelphia and London: W. B. Saunders Company, 1930.

THE MEDICAL CLINICS OF NORTH DAKOTA. (Issued serially, one number every other month.) Volume 13, No. 6 and INDEX VOLUME. (Mayo Clinic Number—May, 1930.) Octavo of 275 pages with 55 illustrations. Per Clinic Year, July, 1929, to May, 1930; Paper, \$12.00; Cloth, \$16.00 net. Philadelphia and London: W. B. Saunders Company, 1930.

MANUAL OF THE DISEASES OF THE EYE FOR STUDENTS AND GENERAL PRACTITIONERS. By Charles H. May, M.D. Thirteenth Edition, Revised with 374 original illustrations including 23 plates, with 73 colored figures. William Wood and Company, New York; Price \$4.00.

This little work on the eye is too well known to need any lengthy description. It is one of the most successful textbooks ever published and probably for a general manual of diseases of the eye it has no superior in the English language. The reviewer has very pleasant recollections of a former edition of this work studied during his student days. In this thirteenth edition the author announces that he has re-written whole chapters and made alterations that would seem necessary to bring the text up to date. Among the subjects incorporated into the present volume is the use of the slit-lamp and corneal microscope. This work has been translated and has gone through a considerable number of editions in Spanish, French, Italian, Dutch, German, Japanese and even Chinese. The student and general practitioner and we do not hesitate even to add the eye specialist, will find this little work as useful as ever.

OBSTETRICS FOR NURSES. By Joseph B. DeLee, M.D., Professor of Obstetrics and Gynecology, University of Chicago, School of Medicine; Obstetrician to the Chicago Lying-In Hospital and Dispensary. New (9th) Edition, Revised. 12mo of 645 pages, with 269 illustrations. Philadelphia and London: W. B. Saunders Company, 1930. Cloth, \$3.00 net.

This book is the ninth edition of Dr. DeLee's well known textbook of Obstetrics for Nurses. Many new proven facts are contained in it and obsolete matter has been omitted. Considerable space is devoted to pre-natal care, particular attention being given to diet. There is also a chapter on infant feeding which has been re-written by Drs. A. F. Abt and B. F. Feingold. Considerable space is devoted to the care of obstetrical patients in the home, since that is where the majority of births still occur.

RECENT ADVANCES IN PHYSIOLOGY. By G. Lovatt Evans, D.Sc., F.R.C.P., F.R.S., Professor of Physiology of the University of London. Fourth Edition. 446 pages. Price, \$3.50. P. Blakiston's Son and Company, Philadelphia, Pa.

The fourth edition of this work occupies a unique place among physiological writings in being a concise yet readable supplement to texts in physiology. Emphasis is given to the advances of the past few years. There are substantial additions to each of the former chapters of which five deal with the physiology and chemistry of the vascular system, three with muscular contraction and exercise and one to each of the following: the nerve impulse, tissue excitability, the functions of the labyrinth, conditioned reflexes and the active principles of certain endocrine glands.

OF GENERAL MEDICAL AND SURGICAL INTEREST

INSULIN: ITS USE AND MISUSE

Nellis B. Foster, New York, says that with the advent of insulin there were sound reasons to hope that the mortality from diabetes would show a definite decrease. This hope has not yet been realized. Mortality statistics for diabetes show a decided increase. In an analysis of 1,800 cases of diabetes, the Metropolitan Life Insurance Company found that insulin had been used in 881, or only 49 per cent. Of those receiving insulin, 54 per cent were given insulin for the first time within a month of death. Why should this be so? First of all there is in the medical profession a most astonishing fear of insulin. A great many physicians seem to be more afraid of insulin shocks than of diabetic coma. The somewhat undue emphasis of the effects of excess dosage contained in the leaflet that comes in each package of insulin is doubtless in part responsible for this timidity. Then, too, there have been chimeras, such as that insulin once begun can never be discontinued. Well, for children it cannot. Formerly diabetic children lived a year or two of miserable existence and then died in coma. Now there are hundreds, probably thousands, who look and act like normal children. There are also thousands of adults who have been carried over some exigency, formerly fatal to diabetic patients, as severe infections, operations, pregnancies or tuberculosis, by the use of insulin, which was a dire necessity for a time but finally was not required. In many surgical conditions complicated by diabetes, insulin is needed during the preoperative and postoperative periods; but in the majority of cases the diabetic state is mild and insulin can be abandoned once convalescence is established. The improvement in the mortality in this class of cases is the answer to one who does not believe in insulin. For several years the death rate for surgical conditions complicated by diabetes at the New York Hospital has been practically the same as for these conditions not complicated by diabetes. That means that acidosis, coma, the spread of infections, inanition are preventable when insulin is used intelligently. In order to control acidosis the surest procedure is to use insulin and dextrose. The amount of insulin required is variable. One should be sure to use enough. The urine should be tested every two hours during the period of intensive treatment; if there is sugar, insulin should be used; if none, dextrose may be given. This general method is applicable in any complication of diabetes, when coma looms as a possible danger. It applies to those not uncommon emergencies which always arise in the middle of the night when laboratory data on blood sugar and so on are not available—in the patient with a neglected strangulated hernia who is rushed to the hospital at 2 a. m., and just as everything is ready in the operating room the junior intern reports happily that the urine is loaded with sugar and that there is a strong Gerhard's reaction, and plenty of albumin. Delaying the operation to permit time for the control of acidosis is not always possible. The thing to do in this sort of emergency is clear: to proceed with the operation and while the patient is on the table to give a good sized dose of insulin, 100 units perhaps, half of it intravenously. This should be followed in an hour by an intravenous injection of 25 Gm. of dextrose, to be repeated hourly until samples of urine are obtainable. In one of these surgical emergencies (intestinal obstruction due to volvulus) from 400 to 600 units of

insulin was used daily for five days to avoid coma. But the patient did not go into coma and recovered from the operation. There is no difference in principle in the management of diabetic coma. The procedure is to give adequate amounts of insulin, and adequate amounts of dextrose, with attention first to the acidosis, letting the glycosuria wait. With patients in coma there is one other consideration that may be of great importance; namely, dehydration. The patient may have taken little or no water for hours and the tissues are in consequence dried out. It is Foster's practice to give saline solution by hypodermoclysis, at least 2 liters in the first twelve hours. He never gives this intravenously because of the sudden burden it imposes on a doubtful heart. The use of insulin in the ordinary case of uncomplicated diabetes is relatively simple. A normal person can take from 5 to 10 units of insulin with no notable effect. From 10 to 20 units a couple of times daily is an ideal way to stimulate the appetite. In the hospital, Foster uses insulin as a means of shortening the hospital period. It saves time to give a patient a maintenance diet and to use insulin for a few days to clear up the urine and bring the blood sugar down to normal rather than to begin with a very low diet and then gradually raise it to maintenance level. This procedure is unnecessary when time is of no consideration. Foster sums up the treatment of diabetes in three words: precision, individualization, boldness.—Journal A. M. A.

NEWER ASPECTS OF THERAPEUTICS OF VIOSTEROL (IRRADIATED ERGOSTEROL)

In the course of a test made by A. F. Hess, J. M. Lewis and Helen Rivkin, New York, of a large number of infants, it was found that although viosterol, in its present dosage, conferred protection against rickets, some evidences of this disorder were evident in a small number of cases. No hypercalcemia or other untoward symptoms developed. The cases that showed signs of mild rickets were remarkable for the fact that the inorganic phosphorus of the blood was maintained at its normal concentration; in no instance did the phosphorus fall below the normal level. This peculiar manifestation—rickets associated with undiminished inorganic phosphorus—was noted last year when irradiated milk was given. It was brought about also in animals by feeding inadequate amounts of viosterol. A clinical experience of this kind indicates that an analysis of the blood for inorganic phosphorus may be misleading and that, when viosterol is being given, the presence of rickets will have to be determined by clinical signs and the roentgenogram. It shows also not merely that rickets is a systemic disease but that local factors may play a determining role in calcification at the epiphyses. Furthermore, it emphasizes the fact that the product of the calcium times the phosphorus concentration in the blood is not a reliable indicator as to whether or not active rickets is present. The present method of irradiation of ergosterol possibly elaborates a factor which increases the inorganic phosphorus in the blood, quite apart from any antirachitic action. Viosterol is a remarkable curative agent for rickets. It is absolutely reliable, very rapid in its action, and never associated with the development of hypercalcemia. The present method of standardizing viosterol on the basis of "cod liver oil units" is founded on the false premise that the action of cod liver oil and of viosterol is the same in infants as in rats. A better method would be to compute the potency directly either as protective or as curative "rat units." The dosage of viosterol should be increased from two and a half to three times. This can best be accomplished by increasing the strength of the solution.—Journal A. M. A.